

塔里木盆地西南坳陷中新统安居安组辫状河三角洲沉积

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摘要: 塔里木盆地西南坳陷中新统安居安组中发现一套辫状河进积到内陆湖泊中而形成的辫状河三角洲沉积体。三角洲3层结构清楚, 可明显地分为辫状河三角洲平原亚相、辫状河三角洲前缘亚相及前三角洲亚相3部分, 可识别出7种微相。辫状河三角洲特征显著, 明显有别于扇三角洲和曲流河三角洲。辫状河三角洲的主体是由含砾砂岩及中、粗粒砂岩组成的辫状河道砂坝及水下分流河道砂坝, 单一砂坝呈下粗上细的透镜状, 透镜体最大厚度为0.7~3.5m不等。垂向上许多砂坝透镜体相互叠置而成厚的砂体。三角洲中交错层理丰富, 其中尤以水道砂坝侧向迁移加积而形成的侧积交错层异常发育为标志。辫状河三角洲砂体是重要的油气储集场所。

关键词: 辫状河三角洲; 安居安组; 西南坳陷; 塔里木盆地

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Braided-river deltaic sediments of the Miocene Anjuan Formation in the Southwest depression,
Tarim basin

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Abstract: A braided river delta sedimentary body protruding into an inland lake is found in the Miocene Anjuan Formation in the Southwest depression, Tarim basin. It has a three-layer structure, i.e. prodelta subfacies, braided-river delta front subfacies and braided-river delta plain subfacies, and 7 microfacies. The characters of the braided-river delta are distinctly different from those of fan deltas and meandering-river deltas. The deposits of braided-river deltas are composed mainly of pebbly sandstone and medium-coarse sandstone. The bars of braided channels and subaqueous distributary channels are the main parts of deltas and they take the form of lenticular bodies. A single lenticular channel sand body has a maximum thickness of 0.7-3.5 m. Vertically many finger-upward lenticular channel sand bodies pile up each other. Cross-stratifications are abundant, but lateral accretion cross-beddings resulting from lateral accretion of channel sand bodies are very well developed. Sand bodies of braided-river deltas in this region are good reservoirs of oil and gas.

Key words: braided-river delta; Anjuan Formation; Southwest depression; Tarim basin