Characteristics of Lithologic Petroleum Reservoirs
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On the basis of the geological conditions and formation processes for lithologic reservoirs and their
distribution characteristics, we conclude that the development of lithologic reservoirs requires unique
geological conditions. They include six aspects: (1) lithologic traps formed at an early stage and
developed over a prolonged period; (2) lithologic reservoirs associated with primary migration and short
distance secondary migration pathways; (3) lithologic reservoirs charged by hydrocarbons in an early
stage; (4) lithologic reservoirs experienced little or no structural destruction after the initial charge; (5)
lithologic reservoirs distributed in both low potential and high potential areas; (6) lithologic reservoirs
associated with both low stand system tracts (LST), and high system tracts (HST). The results of
recent oil and gas exploration in China show that the lithologic reservoirs are excellent for hydrocarbon
accumulation and may have great exploration potential. This type of reservoir should become a major
play type in future exploration.