



## **Tectonic Evolution of Tarim Basin in Cambrian-Ordovician and the Implication for Reservoir Development, NW China**

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In order to search after the control of regional tectonic evolution of Tarim basin on the inside distribution of sedimentary facies and reservoir development, this paper, based on the research of plate-tectonic evolution of Tarim basin, conducts an in-depth analysis on the basin's inside sedimentary response to the Eopaleozoic regional geodynamic reversion from extension to convergence around Tarim plate, and concludes that the regional geodynamic environment of surrounding areas closely contributes to the formation and evolution of paleo-uplifts, differentiation of sedimentary facies in platform, distribution of high-energy reef and bank facies belts, conversion of sedimentary base level from fall to rise, obvious change of lithology from dolomite to limestone, and formation of several unconformity surfaces in Ordovician System in the basin. A series of sedimentary responses in the basin are controlled by the regional dynamic setting, which not only controls the distribution of reservoirs in reef and bank facies but also restricts the development and distribution of karst reservoirs controlled by the unconformity surfaces. This offers the macro geological evidences for us to further analyze and evaluate the distribution of favorable reservoirs.