

Tectonic Evolution and Hydrocarbon Occurring of Block-type Basins in Hinterland of Asia

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Hinterland of Asia includes more then ten large sedimentary basins (Area is bigger then 10×10^4 km²) and amount of moderate to small basins (Area is smaller than 1×10^4 km²). For example in China, large sedimentary basins include the Tarim, Junggar, Qaidam, Ordos and Sichuan etc. Almost all the large sedimentary basins formed after the uplift of the circumjacent orogenic belts. The basements of the basins are older than the uplift time of the circumjacent orogenic belts respectively, which show all the basins in west of China and the hinterland of Asia now have the attributes of Block-type basin, someone say they are orogenic-type basins, all of the concept of basin type show that the main of basin is much different from the circumjacent. The former and today's studies indicate the circumjacent orogenic movement of all the basins not only provide the filling sediments to basin, but also control the structure formation, reconstruction and adjustment of basins. In this paper, the authors mainly consider the effects of the evolution of circumjacent orogeny belts to the geological characters of the basins in hinterland of Asia, especially the geological character in the edges of basins in interesting area of sedimentation, depression, structure movement and heat movement. On the basis of block-type basin concept, this paper illustrates the evolution of the circumjacent orogeny belts how to influence the sedimentation, structure of adjoin basins and under this fact to discuss the conditions of hydrocarbon generation, reservoir, seal, trap, migration and preservation.