

**Studies On Sedimentary Systems of the Chang 10 and Chang 9 Units of Triassic
Yanchang Formation, Ordos Basin**

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Abstract: As one of the most important petroliferous basin in the mainland of China, the Ordos basins Triassic Yanchang formation was the main oil reservoirs. Based on data of outcrops, core observation, particles size analysis, and Palaeogeomorphologic reconstruction, sedimentary system types and features of the Chang10 and Chang 9 of the lowermost beds of the Yanchang Formation are redefined in this paper. The results indicated that 1) the coverage area of nowadays Ordos basin belonged to a drainage basin at Chang 10, but gradually evolved into a catchment basin at the Chang 9, the depocenter of the lacustrine basin tended to migrate to the west from Chang 10 to Chang 9; 2) controlled by lacustrine basin migration and evolution , the Chang 10 river channel sandbodies were under the widespread development with good physical properties , however, the Chang 9 lacustrine basin was not considered as previously supposed “Deltas Everywhere in the Basin” mode but shore shallow lacustrine deposits developed in the southeast, and the physical properties in the west was noticeably better than that in the east, because the distributaries channel sandbodies were noticeably better than that of the shore shallow lacustrine sheet sandbodies.

Key Words : Sedimentary systems ; Chang 9 oil-bearing unit ; Chang 10 oil-bearing unit ; Yanchang Formation, Triassic, Ordos Basin