

Oil and gas resources of shale system orderly accumulation and its prospecting significance-A case study of Chang7 in Ordos basin

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Exploration and practice in the world has been confirmed that shale system contains abundance of unconventional oil and gas resources. Present study mainly concern the unconventional oil and gas type independently, but there is a need to summarized the distribution rules of all type of resources from the field of shale system. This paper based on the shale system studies around the world oil and gas resources distribution and combing with the unconventional oil and gas geological theory innovation technology, put forward the shale oil and gas resources in order to accumulation in shale system, developed oil and gas orderly accumulation theory, and define it with continuity oil-gas accumulation and petroleum system. This paper given the connotation of the theory system and the practice significance. Take Chang7 shale of Ordos basin system as an example, we using the theory of shale oil and gas resources orderly accumulation theory divided the Chang7 shale system resources into outcrop oil shale, moderate buried depth fracturing shale oil, moderate buried depth ICP shale oil, large buried depth shale gas and tight oil areas. Based on this understanding, We suggest stereoscopic exploration and development in shale system, which will provide guidance to three-dimensional oil and gas resources exploration and development in shale system.