

## Gas occurrence and accumulation characteristics of Cambrian-ordovician shale's in the Tarim basin, northwest China

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The Tarim basin is located in northwestern China (photo 1) and is one of the largest water-carrying areas in the world. It is close to the Tianshan Fold Belt in the north, the Kunlun Fold Belt in the southwest, and the Altyn Uplift in the southeast. Tarim is a cratonic base with Archean and Paleozoic to Mesozoic-Praterozoic crystalline bottom. The Sedimentary cover is composed of NeoPraterozoic, Paleozoic, Mesozoic and Cenozoic. a rocky outcrop to the east. The process of identifying offshore rock in a hydrocarbon mine has been established based on external soil measurement, radar testing, ground penetration, tree testing, soil translation, etc. It is used to identify Cambrian and Ordovician reefs in seawater and to predict their location for distribution in the Thim Basin. Four seawater hydrocarbon rocks have been identified in the Tarim Basin, and are still being distributed, according to the Lower-Middle Cambrian alumni and Manjiaer, the Heituo Formation of the Lower-Middle Ordovician in the Tadong region, Saergan Tumuxiuke-Queerqueke Middle Eastern Upper Orov Ord. at Awati Sag to Manjiaer Sag, and the construction of the Yiningan and Lianglitage of the Upper Ordovician from the Awati Sag to the Tazhong area. The development of these rocks was controlled by sea level rise and was shown by different facies in the same category, i.e., different fountain rocks were placed in separate mud areas in the same area. The rock formation was modified by a carbon footprint and was disrupted by a series of siliciclastic explosions.

The Tarim ferry is located in the northwest of China and is the largest in China with large oil and gas resources. Cambrian and ordovician has large marine springs at the base of Tarim and large gas resources. Cambrian-ordovician shales are best placed in areas below the slope of 30 ~ 180 m. Of the shale underground burials are less than -4500 m, they have the highest organic matter by TOC (Total Material) especially between 1.0% and 6.0%, the preferred species of organic matter type I and tyII and high therurity maturity and RoE as 1.0% ~ 2.5%. The mineral composition of these samples of Cambrian-salmovic shale mainly quartz and carbonate minerals

while the mineral content of clay is much lower than 30%, the because these samples include siliceous and calcareous shale and marlstone. Cambrian shale and ordovician are classified as defined as 4% and 3%, stiffness as  $0.0003 \times 10^{-3} \sim 0.09 \times 10^{-3} \mu\text{m}^2$  and  $0.0002 \times 10^{-3} \sim 0.11 \times 10^{-3} \mu\text{m}^2$ , resistance as 2.30 g / m<sup>3</sup> and 2.55 g / m<sup>3</sup>, respectively. The pores in these shale samples show good communication and are mainly mesopores in size. Different types of natural species can be identified as pie-crystal pore, p-granular pore, melted pore, organic pore and shrinkage in combination. Resresvoir bed structures are regulated by mineral composition and diagenesis. The maximum amount of adsorption in methane of le shale is 1.15 ~ 7.36 cm<sup>3</sup> / g, which suppresses its affected properties by biological size, durability and warm ripeness. The natural permissible properties within this shale are jointly controlled by decomposition, dia-genesis, hydrocarbon-producing conditions, storage bed structures and natural gas emergence processes. Natural electricity has undergone short-term cracking and accumulation, collection in the first place in the first phase, repairs and repairs in the next phase. Finally, Y1 and T1 sites have been identified as shale gas exploration enemies in the Tarim mine.