

Un-locking the Pre-salt, Block6, Oman

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ABSTRACT

Unlocking Pre-salt hydrocarbon potential has been a major challenge in exploration for decades. This is partly related to the difficulties in imaging sub-salt strata due to lateral and vertical variations in seismic velocities of salt packages comprised of alternation of Halite/anhydrite and carbonates. The Exploration department in Petroleum Development Oman (PDO) has started a pre-salt project in the begging of 2015 to unlock the yet-to-find volumes of Nafun Group in Block 6 by improving understanding of the basin of the Pre-Salt leads in this basin. The Nafun Group is overlain by Latest Precambrian and Cambrian Ara Group (mainly salt) and underlain by Marinoan diamictites. The clastics and carbonates of the Nafun Group comprise abundant source rocks and reservoir intervals. We used 3D anatratic evolution and eventually lead to a robust basin model.