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## The Importance of Primary Migration in the Persian Gulf Area

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Petroleum migration, sometimes long distance creates new reservoirs with less refining cost. Seventy percent of oil reserve in the Persian Gulf synclinerium is accumulated on the platform area, in Persian Gulf and Arabian peninsula by primary migration before late Alpine Orogenic movement, in the pillow type huge structures, which they were built up by Hormoz salt movement. The Kazhdumi shaly formation is very good source rock. The Kazhdumi shaly facies change gradually to Burgan sandstone, with very good porosity. The oil was moved by overburden pressure from Kazhdumi shale from north-east to south-west to the Soroush, Azadegan and Burgan fields and build up the second largest reserve (Burgan field) in the world. The Gadvan shale also gradually change to Zubair sandstone from north-east to south-west, and made the reservoir rock of Zubair, Rumaila and Azadegan giant fields. In the Arab formation the oil is migrated from Sargelu shale in the North to Arab zone reservoir in the giant oil fields on the platform area in the Persian Gulf and Arabia Peninsula in the south. The prodeigious giant gas fields in the Dalan (Khuff) formation of Permian limestone and dolomite, in the Kangan area north of Persian Gulf to South Pars and ½ Qatar super giant gas field. All gas fields are situated in the area where the isopach map of Cretaceous period shows the minimum thickness 600 metres. The pillow structures in this area were formed by Hormoz Salt movement in the Dalan formation reservoir. The Dalan limestone reservoir in these structures were filled up by primary migration of gas from centre of basin to the platform area into the Dalan reservoir rock, before Alpine Orogenic movement.

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