Sharyoof's Shifting Shorelines

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The Sharyoof oil field is situated in Block 53 in the Masila Basin, onshore in the Republic of Yemen. Sharyoof was discovered by Dove Energy in 2000 with their second exploration well, located 550km east of Sana'a, the Yemeni capital. Block 53 was awarded to Dove in 1998 in relinquished acreage (ex Total) adjacent to the prolific Block 14 (16 producing fields), operated by Nexen. Sharyoof was put on stream 10 months after project commencement in 2001, with a surface pipeline into the Masila system to the Ash Shihr terminal on the Gulf of Aden coast.

The Sharyoof structure is a south-easterly tilted and gently folded fault block striking NE-SW in the north central region of the Masila Basin. The sedimentary succession started in the Late Jurassic with major rifting. The main source rocks are the synrift Late Jurassic Madbi Formation organic rich marine shales in the deep sub-basins surrounding the tilted fault block highs. The postrift Sharyoof reservoir consists of the Upper Qishn Clastics of Early Cretaceous age. The sandstones are fine to medium grained of shallow marine to fluvial origin, often showing strong tidal influence, with common, field-wide, calcite cemented zones. Variations in reservoir communication and fluid contacts are associated with the depositional environments and subsequent facies related diagenesis that resulted in this layered reservoir. Top seal is provided by the Qishn Carbonate Member which marks a marine transgression across the Masila Basin rifted margins.