



Wellbore History

GENERAL

Well 3/7-7 was drilled on the Marsvin prospect in the southern Søgne Basin, close to the Danish border in the southern North Sea. The objective of the well was to explore the hydrocarbon potential in Kimmeridgian-Volgian age ("Intra Farsund") sandstones.

OPERATIONS AND RESULTS

Wildcat well 2/7-7 was spudded with the jack-up installation Mærsk Guardian on 3 September 2008 and drilled to TD at 3930 m, 73 m into the Late Jurassic Haugesund Formation. The well was drilled very efficiently, except for very low penetration rate when drilling in hard marls in the Ekofisk/Tor Formations. The well was drilled with Seawater/spud mud down to 655 m, with KCl polymer mud from 655 to 1308 m, and with CARBO-SEA oil based mud from 1308 m to TD.

The Marsvin 3/7-7 well penetrated four Kimmeridgian age sandstones in the interval 3457 to 3813 m: two J63 sandstones and two J62 sandstones interbedded in Farsund Formation shales. From petrophysical analyses the four sandstones comprised a total of 143 m gross and 106 m net reservoir with porosities in the range 17.5 to 22.4% and an average permeability of 108 mD. All reservoirs were water wet.

Very weak shows, just above that of OBM, were seen in the upper J62 sandstone (3770 to 3813 m), otherwise no oil shows were reported from the well, or they were masked by the base oil in the mud. Similar observation was made in post-well geochemical analyses of samples from the well; all migrated hydrocarbons and even the total organic carbon in cuttings and side wall cores samples were overprinted by the oil base, only the core samples from the lower J62 sandstone clearly showed migrated hydrocarbons.

One core was cut in the lowermost J62 sandstone from 3776.0 m - 3830.5 m, a total of 54.5 m, with a recovery of 99%. RCI wire line water samples were taken at 3748.5 m and at 3799.8 m.

The well was permanently abandoned on 27 October 2008 as a well with shows.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 3/7-7