



Wellbore History

GENERAL

Well 8/10-3 was drilled on the Megalodon prospect in the western part of Norwegian-Danish Basin in the southern North Sea. The objective was to test the pre-Zechstein play potential of the Rotliegende sandstone (Auk Formation equivalent) in relation to a potential Carboniferous source. The evaporites of the Upper Permian Zechstein Group form an effective top seal. The Megalodon well was planned as a vertical HPHT well with an anticipated dry hole TD of 5600 m.

OPERATIONS AND RESULTS

Wildcat well 8/10-3 was spudded with the jack-up installation Mærsk Galant on and drilled to TD at 5737 m in sandstone of the Permian Rotliegende Group. A 12 1/4" pilot hole was drilled from 261 to 1061 m to check for shallow gas. A notable formation gas peak of 7.7% (C1 only) occurred at 566m in a thick sand unit. This correlated with a shallow gas anomaly identified on the site survey 67 m from the well position. The well was drilled with seawater and sweeps down to 216 m, with spud mud and NaCl water based mud from 216 m to 1100 m, with Versatec oil based mud from 1100 m to 3452 m, and with Paratherm oil based mud from 3452 m to TD.

The well was dry at the Rotliegende target. No specific secondary target had been identified, however, due to the position of the well on top of a salt diapir, 4-way dip closures were drilled through at several levels from Paleocene to Top Zechstein. No hydrocarbons were found here. Sandstone and siltstone were penetrated in the Triassic, Skagerrak and Smith Bank Formation. Above this, the Jurassic Mandal, Farsund and Sandnes Formation were penetrated without sand.

The Rotliegende Group, penetrated at 5397.5 m, came in 56.5 m low to prognosis, under 2003 m of Zechstein salt and carbonates. The uppermost 192m of the Rotliegende consisted of shales interbedded with argillaceous sandstones, overlying 154 m of well developed Auk Formation Equivalent sandstones with interbedded shales. Dead oil and tarry oil stains were observed in sandstones at several depths often confined to the upper parts of the sandstone beds. The reservoir properties of the sandstones are good, with porosities averaging 18% and a net-to-gross of 77%. Three pressure points were obtained in the lower sandstone unit using the XPT tool. These indicate permeabilities in the 2 - 4 mD range.

No cores were cut and no wire line fluid samples were taken.

The well was permanently abandoned on 6 October 2010 as a dry well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 8/10-3