



Wellbore History

GENERAL

Well 25/1-11 A is a sidetrack to the Storklakken well 25/1-11 R on the Frigg Ridge between the Frigg and Heimdal Fields in the North Sea. Well 25/1-11R found oil and gas in the Eocene Frigg Formation. The main objective of the sidetrack was to prove the vertical extension of the hydrocarbon column in the Frigg reservoir and to find a potential gas-oil contact. An additional objective was to achieve better control of the Frigg/Odin sand pinch out line.

OPERATIONS AND RESULTS

Well 25/1-11 A was sidetracked on 26 April 2010 from a window in the 13 3/8" casing at 1099 m in the primary well bore. The well was drilled with the semi-submersible installation Aker Barents to TD at 2410 m (2264.5 m TVD) in the Paleocene Heimdal Formation. The well was drilled with Versatec oil based mud from kick-off to TD.

The Frigg Formation came in at 2234 m (2110 m TVD). The upper section down to 2274 m (2145.5 m TVD) was dominantly claystone with thin sandstone stringers. In these sandstone stringers a gas gradient was found. In the main Frigg Sandstone an oil gradient was seen with an oil-down-to contact at 2286 m (2156 m TVD). No water zone was encountered. The gas gradient indicates the possibility of a GOC at 2146.1 m TVD. The pressure regimes in the Frigg Formation in the two well bores are slightly different, indicating a pressure barrier in the Frigg reservoir section between the two wellbores. In the lower section of the well a separate water gradient was found in the Heimdal Formation sandstone with a slightly higher pressure regime compared to the Frigg Sandstone.

No cores were cut. The MDT was run for pressure points and fluid samples. In this operation the MDT got stuck, but was freed and retrieved to surface after a 50 hours cut and thread operation. Eighteen good pressure points out of 24 tests were obtained, and a water sample was taken at 2320 m.

The well was permanently abandoned on 14 May 2010 as an oil and gas appraisal.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 25/1-11 A