



Wellbore History

GENERAL

Well 25/1-11 R is a planned re-entry of well 25/1-11, which drilled a top hole and sat the 13 3/8" casing. The wells are located on the Frigg Ridge between the Heimdal- and Frigg Fields in the North Sea. The main objectives of the 25/1-11 R Storklakken well was to prove hydrocarbons in the Frigg- or Odin Formation sands, penetrate an observed amplitude anomaly and establish hydrocarbon contacts. The secondary objective was to prove oil in the Hermod-Heimdal formations interval.

OPERATIONS AND RESULTS

Well 25/1-11 was re-entered on 4 April 2010 with the semi-submersible installation Aker Barents. Wildcat well 25/1-11 R was drilled from below the 13 3/8" casing shoe at 1178 m to TD at 2338 m in the Paleocene Heimdal Formation. The well was drilled with Glydril mud with 4.3 - 4.8 % glycol from 1178 m to TD.

The Frigg Formation was encountered at 2118 m. The upper part of the Frigg Formation consists of claystone with a few thin sandstone interbeds and traces of siltstone and Limestone down to 2156 m. The lower part consists of massive

sandstone interrupted by thin beds of claystone. In the thin sandstone stringers in the upper part pressure points showed a gas gradient of 0.148g/cm3. In the massive sandstone reservoir an oil gradient of 0.744g/cm3 and a water gradient of 1.030g/cm3 were defined with an intersection indicating an OWC at 2166 m. The gas gradient indicates the possibility of a GOC at 2144 m. The Hermod Formation was encountered at 2244 m and the Heimdal Formation at 2281 m. Both were water wet. No oil shows were recorded outside the Frigg Formation.

No cores were cut. The MDT tool was run for pressure points and fluid samples. MDT samples were taken in the oil zone at 2156 m and at 2165.4 m. A gas sample was taken at 2119.5 m, and verified the presence of gas at this depth. A water sample was collected at 2179 m. A further oil sample was taken with MDT dual packer at 2158 m (mobility 393.5 mD).

The well was plugged back for a geological sidetrack on 26 April 2010. It is classified as an oil discovery.

TESTING

No drill stem test was performed.

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