



Wellbore History

General

Well 25/5-7 was drilled on the David prospect on the north-eastern part of the Heimdal Terrace in the North Sea. The primary objective was to investigate the hydrocarbon potential of the Brent and Statfjord reservoirs. Secondary objective was sands in the Tertiary section.

Operations and results

Wildcat well 25/5-7 was spudded with the semi-submersible installation Ocean Vanguard on 23 September 2010 and drilled to TD at 3045 m in the Late Triassic Hegre Group. Due to shallow gas low risk, a 9"7/8 pilot hole was drilled first and was opened to 17"1/2. No shallow gas was encountered, but several tight spots were encountered while drilling and opening up this section. At 438 m the rig experienced a power shutdown. The rig was on repair from 31 August 2010 until the 4 September (123.75 hrs NPT). The well was drilled with seawater and hi-vis sweeps down to 1160 m and with oil based mud ("non-aqueous based mud") from 1160 m to TD.

The well penetrated a massive Ty sand and minor Lista/Heimdal sands, while no Hermod sand was encountered. All potential reservoirs in the Tertiary were found water bearing. The well encountered the Middle Jurassic Brent sandstones at 2684 m, 40 m shallower than prognosed. The thickness of the Brent was 27.5m, 45m less than expected. The Brent reservoir was found gas bearing. The Statfjord was also encountered 40 m shallow to prognosis, but with a thickness of 135m, close to the prognosis. The Statfjord was found water wet. Petrophysical interpretation indicated that the Brent reservoir has a net-to-gross of 93%, an average effective porosity of 17.5% and a water saturation of 12%. The MDT results showed that the mobility in reservoirs are high and that the gas density is 0.26 g/cc. Apart from weak oil shows in the Brent reservoir a weak oil show (very weak light yellow direct and cut fluorescence) was recorded at 1390 m.

One 54 m core with 100% recovery was cut from 2690 m down to 2744 m covering most of the Brent reservoir sands. MDT gas samples with condensate were taken at 2708 m and at 2689 m.

Well 25/5-7 was plugged back to 2253 m on 24 October 2010. This part of the well bore was permanently abandoned as a gas/condensate discovery. The top hole was designed for re-entry and sidetracking as a producer. The producer 25/5-D-1 H was drilled in 2012.

Testing

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 25/5-7