



Wellbore History

General Block 25/2 is located on the eastern margin of the Viking Graben towards the Bjørgvin Arch. The main targets for well 25/2-7 were the Middle Jurassic Vestland Group and the Early Jurassic Statfjord Formation, which were hydrocarbon bearing in the surrounding wells 25/2-4, 25/2-5 and 25/2-6. In addition possible Late Callovian sands, as in the 25/2 -4 well, constituted a second target.

OPERATIONS AND RESULT

Wildcat well 25/2-7 was spudded with the semi-submersible installation Borgsten Dolphin on 1 April 1982 and drilled to TD at 4110 m in the Early Jurassic Dunlin Group. Operations took 103 days including 13 days of down time. Four and a half days were lost due to WOW, 5.5 days due to rig compensator damage, and 3 days were lost due to a leaking pack off assembly in the 9 5/8" casing. No Callovian sands (Intra Heather Formation) were encountered. Of the two main objectives the Vestland Group was confirmed and tested as a reservoir. The Vestland Group sandstones were encountered at 3406 m, 174 m higher than prognosed. It was 389 m thick, which was thicker than expected, and it consisted of an upper and a lower interval. Massive beds of sandstone, locally slightly shaly or well cemented with some layers of black shales and coal were encountered in the upper interval from 3406 m to 3628 m. The gross thickness of this interval was 222 m and net thickness approximately 179 m. Porosity as estimated from cores 1 and 2 and logs ranged from 2.5 % to 21 % with an average of 12 %. Permeability in this zone was rather low (0.01 to 15.55 mD). The second zone was penetrated from 3628 m to 3795 m. This interval was composed of shales and sandstones alternating in a regular sequences of 15 to 20 m. Net thickness was approximately 77 m with a porosity ranging from 16 % to 21% based on logs. Some oil shows were recorded on cores 1 and 2 in the upper Vestland sand interval. They must be considered as residual shows as the reservoir is water bearing according to the logs. The RFT results confirmed this, showing a hydrostatic pressure gradient. Sandstones of the Statfjord Formation was not found. A silty/shaley interval at 3870 m, 198 m thick, was thought to be an equivalent of them, according to log correlation with the 25/2-5 well, but this was not supported by biostratigraphic data. Due to lack of seismic information at this level there was no incitement to drill deeper. A yellow direct florescence cut was observed on cuttings from this interval from 3917 m to 3920 m. Four conventional cores were cut in the well. Two were cut in the interval 3409 m to 3444 m in the Vestland Group (Sandstone with coals), two were cut in the Dunlin Group. Of the latter one was cut in shale from 3791 m to 3799 m and the other was cut at TD in red brown shale. One RFT fluid sample was taken at 3436.7 m (filtrate, formation water, and traces of oil), another at 3410 m (filtrate and formation water). The well was permanently abandoned on 12 July 1982 as a well with shows.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 25/2-7