



Wellbore History

GENERAL

Well 2/5-12 is located ca 15 km northeast of the TOR field on the Steinbit Terrace in the Central Graben. The objective of drilling well 2/5-12 was to test the hydrocarbon potential of the Upper Jurassic section within a four-way dip closure. A thick wedge of Jurassic deposits was identifiable from seismic. Mapping suggested the reason for the thickened section was due to an influx of sand from the shelf to the northeast. The primary target horizons were the R 1 and R 2 units within the Upper Jurassic Farsund Formation. These were thought to be lateral equivalents of the Gyda Sandstone seen in wells 2/2-1 and 2/2-4. The reservoir was thought to be sealed by Upper Jurassic shales. The four-way dip closure was formed during the Late Cretaceous to Palaeocene by inversion of a Jurassic fault. Subsequently it was covered by Palaeocene and younger post-rift sag sediments. The structure onlaps Late Cretaceous shales and chalks.

OPERATIONS AND RESULTS

Wildcat well was spudded with the jack-up installation Transocean Nordic on 24 November 2001 and drilled to TD in the Late Jurassic Farsund Formation. The well was drilled with seawater and gel sweeps down to 954 m, with KCl/Glycol mud from 954 m to 2381 m, and with XP07 oil based mud from 2381 m to TD. The well proceeded generally as planned without any really major problems. Data acquisition went according to plan with the exception of the 17.5" wire line logging run, which had to be dropped due to severe well bore stability problems.

All the easily identifiable lithostratigraphic tops and log markers came in deeper than prognosed by circa 60 m. The prognosed sandstone reservoirs in R1 and R2 were absent. Shows were recorded in claystones of the Mandal and Farsund Formations. Pore pressures in the Tertiary were higher than prognosed, but were as prognosed in the Cretaceous and in line with expectations in the Jurassic. Drilling terminated 71 m above planned TD when the kick margin was lost. No cores were cut and no fluid samples were taken. At this point the whole of the R1 unit and the better part of the R2 unit had been drilled fulfilling the well objectives. The well was permanently abandoned on 22 February 2002 as a dry well.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 2/5-12