



Wellbore History

GENERAL

Well 6406/1-4 is located west of the Kristin Field on the western margin of the Sklinna Ridge off shore Mid Norway. It was drilled to appraise the gas condensate discovery 6406/1-2 and was a continuation of the interrupted 6406/1-3. The primary objective was to prove economical hydrocarbon reserves in the Late Cretaceous Lange Unit 3 Unit of the Cromer Knoll Group. Secondary objective was the hydrocarbon potentials of the Cretaceous Lange Sequence 1 and 2 sandstones.

OPERATIONS AND RESULTS

Appraisal well 6406/1-4 was spudded with the semi-submersible installation Ocean Vanguard on 16 August 2005 and drilled to TD at 4596 m in silty to sandy calcareous claystone of Triassic (Ladinian - Carnian) age. The well took 133 days to complete compared to the planned 70 days. The main reason for this was a problem with an anchor winch. This was observed while drilling the 17 1/2" section. The well was temporary abandoned and taken to Kristiansund for repairs. Total time lost before normal operations were resumed was 41 days. The well was drilled with seawater and bentonite sweeps down to 1310 m, with water based Performadril mud (a KCl mud) from 1310 m to 2315 m, and with XP-07 oil based mud from 2315 m to TD.

The top of the Late Cretaceous Lange Unit 3 was found at 4311 m, 27 m deeper than prognosis. The top of the Lange 1 + 2 Units was found at 4379 m, 2 meter deeper than prognosis, with only a few thin sandstone layers. No moveable hydrocarbons were reported from the well, but shows were observed on cuttings from the Lange Unit 3. The shows were evaluated to be residual and described as even, dull to very dull yellowish to dull golden direct fluorescence with slow to very slow weak dull yellowish/golden cut fluorescence. No Jurassic sediments were present in the well. The well penetrates a hiatus at BCU from Middle Albian to the Middle/Late Triassic.

No cores were cut in the well. One MDT sampling was performed at 4316.8 m using dual packer. Fluid analyser showed water at this depth. Seven water samples were taken using 4 SPMC, 2 MPSR and 1 Gallon MRSC.

The well was permanently abandoned on 26 December 2005 as a well with shows.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6406/1-4