



Wellbore History

GENERAL

Well 30/6-6 was drilled on the 30/6 Alpha structure (Oseberg fault block) in the North Sea, as the fifth well drilled on this structure. The well was drilled down-dip of 30/6-3 and 30/6-4. The primary objective of this well was to define the oil-water contact for the structure. This would be achieved by penetrating the OWC or by extrapolation of fluid gradients from RFT and DST pressure measurements.

OPERATIONS AND RESULTS

Appraisal well 30/6-6 was spudded with the semi-submersible installation Deepsea Saga on 9 January 1982 and drilled to TD at 3225 m in the Early Jurassic Cook Formation. Drilling operations proceeded without specific problems down to ca 1300 m. At this depth problems related to excessive torque and drag on short trips occurred. The mud weight was then reduced from 1.4 to 1.29 after which drilling again proceeded without problems. The well was drilled with spud mud down to 200 m, with Gel/seawater/spud mud from 200 m to 1793 m, and with gel/lignosulphonate mud from 1793 m to TD.

Top Viking Group was penetrated at 2587 m and consisted of 113 m Draupne Formation shales on top of 120 m Heather Formation. The Brent Group was encountered at 2820 m. It was water bearing. Combined RFT-pressures from 30/6-6 and 30/6-4 gave an oil/water contact at 2720 +/- 20 m, which was later confirmed by the build-up pressures from the DST and the calculated water density under reservoir conditions. No indications of H2S were seen in this well. No shows are reported from the well.

Three cores were taken in the Ness and Etive formations from 2921 m - 2964 m. RFT water samples were attempted at 2879 m, 2955 m and 2956 m, but were only moderately successful due to poor recovery and contamination with cushion water.

The well was permanently abandoned on 24 March 1982 as a dry well.

TESTING

One DST was perforated over 2946 to 2962 m in the water zone in the Etive Formation. The well was production tested and tests on reservoir parameters were carried out, including use of tritium tracers. The well produced 380 m3 water /day through a 64/64" choke. The maximum flowing temperature recorded during the test was 116.5 deg C. Water samples were taken. The production test was followed by an injection test through the same perforations.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 30/6-6