



Wellbore History

GENERAL

Well 36/7-1 is located on the Måløy slope, ca 4 km SE of the 35/9-1 Gjølå Discovery well. It was the third exploration well to be drilled in the licence area and tested the hydrocarbon potential of the A-East structure. The primary target was the transgressive sands of the Sognefjord and Fensfjord formations. Brent Group sandstone was secondary target.

OPERATIONS AND RESULTS

Wildcat well 36/7-1 was spudded with the semi-submersible installation West Vanguard on 31 March 1996 and drilled to TD at 2841 m in basement rock. No significant technical problems were encountered in the operations. The well was drilled with seawater and hi-vis sweeps (spud mud) mud down to 1256 m and with ANCO 2000 mud from 1256 m to TD.

The well discovered oil and gas in Intra Draupne sandstones and the Sognefjord Formations of Late Jurassic age as well as in middle Jurassic Fensfjord Formation. The Brent Group was dry. The reservoir consists of sandstone, siltstone and shale. The free oil and free water levels were clearly defined from the MDT pressure data and were consistent with the fluid contacts apparent from the logs. The FOL was at 2337.6 m (2315.0 m TVD MSL), and the FWL was at 2372.1 m, (2349.5 m TVD MSL). Proven gross gas column was 217 m (2120 -2337 m) and proven gross oil column was 34.5 m (2337 - 2371.5 m). Reported oil shows began at 1910 m and ended at 2429 m. Evaluation of MDT data from well 36/7-1 showed the same pressure environment within the oil zone of the Fensfjord Formation as in the wells 36/7-1 and 35/9-2.

A total of 280 m core was retrieved in nine cores from the interval 2124 m to 2429.5 m in the Sognefjord and Fensfjord Formations. MDT sampling was performed at 2443.5 m in the water zone.

The well was permanently abandoned on 7 May 1996 as an oil and gas discovery.

TESTING

A successful production test was performed in an approximately 12 m thick sandstone layer within the oil zone (2362.9 - 2367.9 m). Production was 1025 Sm³ /day on a 64/64 choke. The fluid contained 0.15% CO₂ and the gas/oil ratio was 166 Sm³/Sm³. The oil density was 0.82 g/cm³. No water was produced.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 36/7-1