



Wellbore History

GENERAL

Well 34/10-16 was drilled on the Gullfaks Sør structure, 8 km south of the Gullfaks Field. The purpose of this well was to investigate a fault block, en echelon to the first fault block tested by well 34/10-2, for possible extension of hydrocarbon accumulation. The principal drilling objective was sandstones of the Brent Group. Secondary objectives were the Cook and Statfjord sands, of which the Statfjord sand proved the presence of oil in well 34/10-2.

OPERATIONS AND RESULTS

Appraisal well 34/10-16 was spudded with the semi-submersible installation Nordraug on 14 December 1982 and drilled to TD at 4042 m (4027 m TVD) in the Late Triassic Lunde Formation. Excessive time were lost due to waiting on weather, hole problems, logging problems and other technical problems. These problems consumed a total of 1080 hours or 45 days downtime. The well was drilled with spud mud down to 225 m, with gel/seawater from 225 m to 617 m, and with lignosulphonate CMC/gel mud from 617 m to TD.

The Brent Group came in at 3171 m and contained both oil and gas with the gas/oil contact at ca 3350 m and the oil/water contact at ca 3422 m, according to the logs. The gas net pay was estimated to 84 m with average porosity 18.2% and average water saturation 22.5%. The oil net pay was estimated to 29.5 m with average porosity 16.5% and average water saturation 38.9%. No hydrocarbons were encountered in the Cook and Statfjord Formations. No oil shows were recorded outside of the Brent Group.

A total of 23 cores were cut, 22 of these covering nearly all of the Brent Group and the last one covering a sandstone in the upper Statfjord Formation. The RFT tool was run for fluid samples. Segregated RFT samples were recovered from 3356 m (oil) and 3345 m (condensate). No pressure points were acquired due to bad hole conditions.

The well was temporary plugged 11 April 1983 and later re entered for drill stem testing. It is classified as an oil appraisal well

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 34/10-16