



Wellbore History

GENERAL

Wildcat well 34/10-43 S was drilled in a structure in the south-eastern part of the Tampen Spur area, on one of the westerly-rotated fault blocks east of the Beta Ridge. The structure is eroded at BCU level, successively deeper towards the east, and is limited by east-west faults towards north. Planned well trajectory was highly deviated in order to test several objectives in one well. Primary objective was to test the potential for hydrocarbons in Middle Jurassic sandstones of the Statfjord Formation. The secondary objective was the Brent Group, Cook and Lunde Formation. Tertiary objectives were to penetrate Paleocene in an optimal position for exploring the lowermost part for sand/hydrocarbons (Ty Formation) and at TD, a prospect of the Late Jurassic, Munin Member. The planned TD of the well was at 4505 m (2565 m TVD RKB) with an inclination of 67 deg .

OPERATIONS AND RESULTS

Well 34/10-43 S was spudded with the semi-submersible installation Transocean Wildcat on 25 February 2001 and drilled deviated through Triassic sediments of the Lunde Formation as the oldest penetrated sediments, to TD at 5725 m (3219.9 m TVD RKB) in the Early Cretaceous Cromer Knoll Group. The drilling progress was very good down to the Lunde Formation. After logging of the reservoir sections in the Middle-Early Jurassic and Triassic objectives, the drilling continued to final tertiary objective in the Late Jurassic prospect in the Munin Formation. This part was significantly slower to drill, caused by places of tight hole and also because of hard lithology. Several bits had to be implemented before TD was reached with an inclination of approximately 101 deg . The well was drilled with KCl mud down to 709 m, and with oil based mud (Versavert) from 709 m to TD.

There were no sands in the Paleocene prospect, and the Shetland Group was therefore encountered more than 100 m shallower than expected. The Brent prospect was much more eroded at the well trajectory than was prognosed. It was thus only partly penetrated and was interpreted as water bearing. Also the Cook Formation was water bearing, and this Formation was penetrated in an optimal position in the structure. Eight m (3 m TVD) of hydrocarbons were identified on logs in the upper Statfjord- (Nansen) Formation, in a reservoir with very good properties. The OWC was at 2848 m TVD MSL. Pressure points indicated an oil zone with a density of approx. 0.05 bar/m. Middle/Lower Statfjord and the Lunde Formations showed yet another water zone. The extended part of the well penetrated Munin sands, exactly as prognosed. The sands had very good reservoir potential, yet without hydrocarbons. The well gave very good seismic reflectors in this complex sub-basin.

No conventional cores were cut and no fluid samples were taken in the well.

The well was permanently abandoned on 11 April 2001 as a minor oil discovery.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 34/10-43 S