

Wellbore History

GENERAL

Wildcat well 31/4-12 is located just east of the Brage Field on the Bjørgvin Arch in the Northern North Sea. The main objective of the well was to prove hydrocarbon volume of economic interest in the Sognefjord formation of the Viking Group within the Idun Prospect in block 31/4. The secondary objective was to investigate the stratigraphic distribution and the reservoir potential of the Fensfjord formation.

OPERATIONS AND RESULTS

Well 31/4-12 was spudded with the semi-submersible installation Deepsea Trym on 6 February 2005 and drilled to TD at 2226 m in late Middle Jurassic sediments of the Fensfjord Formation. The well had 26% downtime due mainly to rough weather and problems with the BOP. Otherwise no significant problems were encountered in the operations. The well was drilled with bentonite mud down to 1184 m and with "Aqua-drill" glycol mud from 1184 m to TD.

Both Draupne Formation sands and Sognefjord Formation sand were penetrated. A total of 20 m of the main reservoir Sognefjord Formation sand was penetrated in the well. Approximately 17 m of this interval was reservoir sand with excellent quality (close to the P10 values simulated in H-risk). The Draupne sands were dated to Kimmeridgian age, while the Sognefjord sand was of Oxfordian age. The lower Fensfjord Formation reservoir sand, penetrated close to TD of the well, was of Late Callovian - Early Oxfordian age. All sands were water bearing, and no shows were observed. The MDT pressure tests showed that the Draupne / Sognefjord reservoir was depleted by approximately 10 bar indicating a common aquifer with a producing reservoir, most likely the Brage Nord Sognefjord reservoir.

The wire line logging programme was reduced as no commercial discovery was made. No cores were cut and no wire line fluid samples were taken.

The well was permanently abandoned on 14 March 2005 as a dry well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 31/4-12