



Wellbore History

GENERAL

Well 6406/3-6 is located on the Halten Terrace on the western part of the Tyrihans Sør structure. The overall goal for the well was to appraise the Tyrihans Sør Discovery. The main objectives were to sample formation fluid from Tyrihans Sør in order to determine the hydrocarbon phase and to identify any possible erosion in the western part of the Discovery.

OPERATIONS

Appraisal well 6406/3-6 was spudded with the semi-submersible installation Stena Don on 21 October 2001. The rig drilled to a TD of 4175 m in the Jurassic Tilje Formation. The well was drilled in a water depth of 273 m, with RKB at 24 m. The well was drilled with seawater and hi-vis sweeps down to 1780 m and with Versavert oil based mud through the 12 1/4" and 8 1/2" sections from 1780 m to 3654.5 m, 4.5 m into the Garn Formation. The subsequent 6" section to TD was drilled with KCl / glycol / low sulphate water-based mud (Glydril).

The well penetrated mainly mudstones above the Jurasssic Fangst Group with siltstone intervals in the Nise and Kvitnos Formations. No shows were reported above the Fangst Group. A thick Garn Formation was found, with no trace of erosion. Hydrocarbons were found in the Garn Formation with oil-water contact at 3683 m TVD MSL, and in the upper part of the Ile Formation with oil-water contact at 3825 m TVD MSL. Good shows were recorded in the Garn and Ile Formations down to 3840 m. Due to problems with real-time data mainly memory data were available from MWD in the 8-1/2" section. Both LWD real time runs failed in the 6" section. However, wire line logging covered most of the 6" section. Recovery of sidewall cores was excellent. VSP with P+S mode sonic was gathered in the Garn Formation, and several runs were performed with MDT, collecting samples from Garn, Ile and Tilje (water) Formations. A number of pressure data points gave good correlation for gas and fluid contacts. No conventional cores were cut. The well was completed on 15 November 2002, permanently plugged and abandoned as an oil and gas appraisal.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6406/3-6