



Wellbore History

GENERAL

Exploration well 6507/11-6 was drilled on the Colette structure, a downfaulted structure west of the Midgard Field in the Haltenbanken area. The primary objectives of the well were to test the hydrocarbon potential of the Middle Jurassic Garn and Ile Formations. A stratigraphical trap at top Lysing Formation level and possible hydrocarbon trapping in the uppermost part of the Early Jurassic Tilje were secondary targets.

OPERATIONS AND RESULTS

Wildcat well 6507/11-6 was spudded with the semi-submersible installation Transocean Arctic on 30 June 2001 and drilled to TD at 3440 m in Late Jurassic sediments of the Åre Formation. The 36" and 26" hole sections down to 489 m were drilled with seawater, the 17 1/2" section down to 1283 m with water-based KCL mud, and the remaining 12 1/4" and 8 1/2" hole down to TD was drilled with Versavert oil-based drilling mud. No shallow gas was encountered in the well, in accordance with the weak shallow gas warning in the pre-drill well documentation.

The main result of the well was the discovery of a 30 m column of gas from the top of the Middle Jurassic Garn Formation at 3030 m. A gas-water contact in the Garn Formation was interpreted at 3059.5 m (3035.0 m TVD MSL). A pressure gradient of 0.22 g/cc (similar to Midgard) within the gas zone was defined by good quality MDT pressure measurements. Pressure data indicated small pressure barriers between the Garn, Ile, and Tilje Formations. However, the sandstones in lower part of the Garn Formation as well as the sandstones in the Ile, Tilje and Åre Formations were all water bearing. There were no Lysing Formation sandstones in the well position.

One core was cut covering 27.6 m of the 47 m thick Garn Formation. The core contained almost 100% clean sandstone and the reservoir quality was excellent. There were very good reservoir quality sandstones also in the Ile, Tilje and Åre Formations. A total of 27 rotary sidewall cores were recovered (100% recovery) from the Jurassic section. Fluid samples were obtained from three levels within the Garn Formation.

The well was permanently abandoned on 8 July 2001 as a minor gas discovery.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6507/11-6