



Wellbore History

GENERAL

Well 6507/11-4 is located ca 3.5 km north-north west of the Midgard Field on the Halten Terrace. The objective was to test the hydrocarbon potential in Jurassic sandstones in a rotated north-south trending fault block. Shallow gas was warned at the following levels: 470-532/539- 601- and 671 m. TD was planned at 2950 m.

OPERATIONS AND RESULTS

Wildcat well 6507/11-4 was spudded by the semi-submersible installation Treasure Saga on 16 May 1987, and drilled to TD at 3045 m in the Early Jurassic Aldra Formation (Tilje Formation). Due to excessive deviation during the first 13 m, the TGB was pulled and moved 10 m towards east where the well was re-spudded on May 17. Otherwise, drilling proceeded without significant problems. No shallow gas was encountered at the warned levels. The well was drilled with seawater and hi-vis mud down to 817 m, with gypsum / polymer mud from 817 m to 2655 m, and the remaining 8 1/2" section from 2655 m to TD with gel / polymer mud.

The argillaceous Grip Group (Viking Group) was encountered at 2530 m, and the sandy Tomma Formation (Fangst Group) at 2676.5 m RKB. The latter consisted of two sandstone units (Garn and Ile Formations) separated by a more argillaceous unit (Not Formation). The gross sand thickness in the two units was 174 m and the porosity was good. The calculated average values of log porosity and the net to gross ratio for the Garn Formation was 24.6% and 0.96 respectively. The corresponding figures for the Ile Formation were 22.1% and 0.74. The Leka Formation (Ror Formation) consisted mainly of claystone, while claystone and sandstone were alternating in the Aldra Formation (Tilje Formation). Sporadic oil fluorescence were observed in lamellas of silty sandstones in the Late Cretaceous at 2220 m, 2265 m, and 2315 m. No shows were observed in the Jurassic sandstone units. Post-well organic geochemical analysis did not confirm the shows in Late Cretaceous, but revealed a possible occurrence of trace migrated hydrocarbons in cuttings at the base of the Melke Formation at 2675 m.

Two cores were cut in the intervals 2564- 2593 m (Melke Formation) and 2685- 2713 m (Garn Formation). No wire line fluid samples were taken.

The well was permanently abandoned on 22 June 1987 as a dry well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6507/11-4