



Wellbore History

GENERAL

Well 6407/2-6 S was drilled ca 4 km northwest of the Mikkell field and ca 8 km south of the 6407/2-5 S Nona discovery in the Norwegian Sea. The objective was to prove and encounter an economic volume of hydrocarbons in the Early Jurassic Tilje Formation. A secondary objective was to prove hydrocarbons in the Early Jurassic Ror Formation.

OPERATIONS AND RESULTS

Wildcat well 6407/2-6 S was spudded with the semi-submersible installation Ocean Vanguard on 3 April 2010 and drilled to TD at 3230 m (3188 m TVD) in the Early Jurassic Åre Formation. During drilling of the 17 1/2" hole, a distinct drilling break was observed at 1086 m. GR logs from this zone indicated clean sandstone and the resistivity log indicated water. It was concluded that the sandstone was water wet with some dissolved gas. No significant problems were encountered in the operations. The well was drilled with seawater and hi-vis pills down to 609 m, with KCl/Glycol mud from 609 m to 1313 m, and with XP-07 oil based mud from 1313 m to TD.

The Tofte Formation was encountered at 2916.9 m (2887.6 TVD). Weak oil shows and high gas readings indicated gas in the Tofte Formation, but this was not verified logs and pressure data in the potential reservoir sands. The Tilje Formation was penetrated at 2993.2 m (2960 m TVD), which was 37 m shallower than prognosed. A 72 m TVD gas column and a 15 m TVD oil column were proven in the Tilje Formation. No oil shows were reported above Tofte Formation or below Tilje Formation.

Two cores were cut in the intervals 2997 - 3051.5 m and 3070 - 3125 m, both in the Tilje Formation. Fluid samples were taken with the MDT single probe equipment. Gas was sampled at 2940 m in the Ror Formation and at 2994.06 m in the Tilje Formation, oil was sampled at 3068.9 m and 3078.3 m, while water was sampled at 3096.6 m in the Tilje formation. The Tilje oil sample at 3078.3 m analysed offshore contained only 1% mud contamination, while the sample at 3068.9 m had a mud contamination of 12 %.

The well was permanently abandoned on 13 May 2010 as an oil and gas discovery.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6407/2-6 S