

Wellbore History

GENERAL

Well 6506/9-3, was drilled on the Smørbukk Nord prospect on the Halten Terrace in the Norwegian Sea. The primary objective was to prove petroleum in the Middle - Early Jurassic Garn, Ile and Tofte formations. The secondary objective was to prove petroleum in the Early Jurassic Ror, Tilje and Åre formations. A third objective was to test for possible hydrocarbon bearing sands in Early Cretaceous intra-Lange Formation sandstones.

OPERATIONS AND RESULTS

Wildcat well 6506/9-3 was spudded with the semi-submersible installation Transocean Leader on 16 June 2013 and drilled to TD at 4692 m in the Early Jurassic Åre Formation. There were no gas warnings at the location and no shallow gas was seen. Operations proceeded without significant problems. The well was drilled with seawater and hi-vis sweeps down to 1171 m and with XP-07 oil based mud from 1171 m to TD.

Thin, partially calcite cemented sand stringers with fair gas saturation were penetrated in the Lange Formation between 3723 m and 3885 m. The well encountered a gas/condensate column of 47 metres in the Garn and upper Not formations with a down-to contact at 4284 m. The reservoir characteristics are good in the Garn and upper Not formations, while they are somewhat poorer than expected in the Ile formation. The Ile Formation proved gas condensate in the MDT sample at 4305.7 and oil in the sample at 4346 m. Geochemical analysis of the cores indicate a gas-oil contact at 4346 m and an oil down to at 4348 m. The deeper Tofte and Tilje formations contain some gas in a tight reservoir; the Åre Formation is water-wet.

A total of 132.6 m core was recovered in two cores from the interval 4241 m to 4385 m in the Garn, Not and Ile formations. The core to log depth shift was +4.5 m for core 1 and +4.0 m for core 2. MDT fluid samples were taken at 4250.9 m (gas condensate), 4305.7 m (gas condensate), and at 4346 m (water and oil). All samples were highly contaminated with mud filtrate.

The well was permanently abandoned on 27 August 2013 as a gas/condensate discovery.

TESTING

No drill stem test was performed.