

Wellbore History

GENERAL

Well 6406/6-3 Mjøsa was drilled on the Halten Terrace in the Norwegian Sea, about 25 kilometres south of the Tyrihans field and about 15 kilometres northeast of the 6406/9-1 Linnorm discovery. The primary target was the Middle Jurassic Ile Formation with secondary targets in the Lower Jurassic of Tofte, Tilje and Åre Formation.

OPERATIONS AND RESULTS

Wildcat well 6406/6-3 was spudded with the semi-submersible installation Transocean Arctic on 14 April 2013 and drilled to TD at 4420 m in the Early Jurassic Åre Formation. A 9 7/8" pilot hole was drilled from 377 m to 1400 m to check for shallow gas. No shallow gas was seen. Operations proceeded without significant problems. The well was drilled with seawater down to 377 m, with KCl/GEM/polymer mud from 377 m to 1400 m, and with XP-07 oil based mud from 1400 m to TD.

The Melke Formation, where the 9-7/8" casing was set, was found thinner than expected due to condensed and partially eroded section on top of the structure. The Garn Formation was encountered at 3802 m. The Garn Formation was evaluated pre-drill as most likely shaled out, but proved to have good overall reservoir quality and was also found to contain dry gas in the topmost part with a gas-water contact at 3816 m. All the pre-drill Jurassic targets deeper down were found water bearing and in general with better than expected reservoir quality. No oil shows were described in the well.

No conventional cores were cut. Sidewall cores were taken in the Garn Formation. RCX fluid samples were taken at 3803 m (gas) and 3841.5 m (water).

The well was permanently abandoned on 9 July 2013 as a gas discovery.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6406/6-3