

Wellbore History

GENERAL

Well 34/6-2 S was drilled on the Garantiana prospect on the northern continuation of the Visund structure on Tampen Spur in the North Sea. The primary objectives were Early Jurassic sandstones in the Cook Formation and Statfjord Group. Secondary objectives were the Triassic Lunde Formation and sandstones in the Middle Jurassic Brent Group.

OPERATIONS AND RESULTS

Well 34/6-2 S was spudded with the semi-submersible installation Borgland Dolphin on 6 August 2012 and drilled to TD at 4335 m (4081 m TVD). No significant problem was encountered in the operations. The well path was vertical down to 2900 m, and then deviated with a maximum deviation of 47° at 3880 m. The well was drilled with seawater and bentonite mud down to 1480 m, with Aqua-Drill mud from 1480 m to 2047 m, with Carbo-Sea NABM mud from 2047 m to 3948 m, and with Magmateq NABM mud from 3948 m to TD.

No Brent Group sandstones were encountered in the well, only shales and siltstones of the Rannoch Formation. The Cook Formation primary target was encountered at 3654 m (3566 m TVD), top Statfjord Group at 4055 m (3871 m TVD), and top secondary target Lunde Formation at 4252 m (4017 m TVD). An oil-down-to situation was encountered at 3777 m in the Cook Formation, with a hydrocarbon column of 123 m (105 m vertical), a net/gross of 66 % and an average effective porosity and water saturation of 19 %, respectively. The Statfjord Group and Lunde Formation were water wet.

Apart for shows in the Cook Formation weak oil shows were recorded at 3785 to 3795 m and 3978 to 4030 m in the Amundsen Formation, and at 4195 to 4245 m in the Statfjord Formation. No shows were reported above top Cook Formation.

One 54 m core barrel was cut in the Cook Formation from 3663 m to 3717.33 m with 100 % core recovery. RCl oil samples were recovered at 3705.2 m, 3746 m, and 3768.5 m within the Cook Formation reservoir.

The well was plugged back for sidetracking on 5 November 2012. It is classified as an oil discovery.

TESTING

A drill stem test was performed from the interval 3677.2 to 3750.2 m. The test produced 670 Sm3 oil and 16500 Sm3 gas /day through a 28/64" choke. The GOR was 33 Sm3/Sm3 and the oil density was 0.871 g/cm3. The gas contained 10 ppm H2S and 7% CO2.