



Wellbore History

GENERAL

Well 15/5-3 was drilled in the Vilje Sub-basin between the Enoch and the Gudrun fields in the North Sea. The primary objective was to test possible sandstone reservoirs of Triassic age. A secondary objective was to test the Middle Jurassic Sleipner Formation. The well was planned to penetrate approximately 400 m into the Triassic and had a projected total depth of 4200 m.

OPERATIONS AND RESULTS

After two unsuccessful spuds, Wildcat well 15/5-3 was spudded with the semi-submersible installation Nordtrym on 21 August 1980 and drilled to TD at 5042 m in shale and sandstones of Late Permian age. Hole reaming was necessary in intervals below 2250 m, otherwise the well was drilled without significant problems or incidents. The hole was good and vertical down to ca 3000 m. Below 3200 m the hole deviation increased to between 3° and 8°. The well was drilled with seawater and hi-vis sweeps down to 615 m, with a seawater/Dextrid mud from 615 m to 2029 m, with seawater/polymer/Q.Broxin mud from 2029 m to 3834 m, and with a salt-saturated Dextrid mud from 3834 to TD.

None of the objective sandstone reservoirs were found in the well. The Draupne Formation was encountered at 3665 m. After penetrating 135 m of Draupne shales, the well encountered 1050 m of Zechstein evaporites. At this point, it was decided to deepen the well further in order to explore the pre-salt rocks. Below these, undefined shales and thin sandstones of Late Permian age were found.

Traces of oil in the mud was observed during P&A - see below. Poor oil shows were recorded in thin limestone stringers at 2850 m, 2920, and in the interval 3355 to 3365 m. No shows were recorded in the pre-Zechstein shales and sand sequence.

Two cores were cut. Core 1 was cut from 3815 to 3834.4 m with 59.9% recovery. Core 2 was cut from 5038 to 5042 at TD with 94% recovery. No fluid samples were taken on wire line. However, while cutting the 9 5/8" casing during P&A, small amounts of oil were found floating on the drilling mud. The oil is assumed to originate from two 2-meter thick sandstone stringers at 1474 m and 1479 m in the top of the Grid Formation. From wire line log interpretation, these show high porosities and high hydrocarbon saturations.

The well was permanently abandoned on 7 December 2015 as a well with shows.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 15/5-3