



Wellbore History

GENERAL

Well 15/12-20 S was drilled from the Varg Field production Platform in the southern Viking Graben in the North Sea. The primary objective of the well was to explore a potential undrained compartment in Triassic sands. A secondary objective was potential Late Jurassic sands that could exist above the Triassic sands.

OPERATIONS AND RESULTS

Wildcat well 15/12-20 S was drilled with the jack-up installation Mærsk Giant, as a sidetrack from development well 15/12-A-7 on the Varg Field. It was kicked off 28 May 2008 from 1306 m, just above the 13 3/8" casing in the 15/12-A-7 development well, and drilled to TD at 4192 m (3142 m TVD) in the Late Triassic Skagerrak Formation. Significant operational problems were not encountered although 21% of the rig time was counted as non-productive. The main contributor to non-productive time was failure to mill the window in the 13 3/8" casing during kick-off. The well was drilled with Carbo-Sea oil based mud from kick-off to TD.

The Oxfordian Sandstone that makes up the reservoir over Varg Field was absent as forecast. A discovery was made in Middle Jurassic Sleipner Formation sandstone. This sand, encountered at 3808 m, was not prognosed. It contained oil down to a lithological contact at ca 3842 m (2878 m TVD SS). The underlying Triassic was encountered at 3874 m and was dry. Good shows on sandstones were reported in cuttings at 3810 and all through to the end of the cores at 3875 m. Formation Gas peaks up to a maximum of 4% were seen in the Sleipner formation. Resistivity was initially high, 15 ? 30 ohm/m from 3812 m (after the coal) and dropped off at 3835m MD to 0.3 - 0.8 ohm/m.

Two cores were taken (26.26 m and 54.85 m) from the Sleipner Formation and ca 25 m into the Triassic. Reservoir pressures were taken using TesTrak and an oil gradient of 0.935 SG was obtained although a water gradient was not established. No wire line fluid samples were taken.

Exploration well 15/12-20 S is classified as an oil discovery. On 1 July 2008 7" liner was run to 4191 m and the well was reclassified to development well 15/12-A-7-A.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 15/12-20 S