



Wellbore History

GENERAL

Well 6406/3-9 was drilled on the Halten Terrace east of the Kristin field and to the north of the Tyrihans field. The objective was to evaluate the presence of movable hydrocarbons in the Lange sandstones unit (primary target) and Lysing sandstone unit (secondary target); down dip from the 6506/11-2 and 6506/11-4 S wells.

OPERATIONS AND RESULTS

Wildcat well 6406/3-9 was spudded with the semi-submersible installation Transocean Winner on 9 November 2011 and drilled to TD at 4183 m in Albian age shale of the Lange Formation. The well was not drilled within the AFE time and cost estimate. This was primarily due to poor weather conditions (third worst weather recorded ever since 1958), which caused prolonged periods of downtime. Despite this and many other operational problems data acquisition was successful and gave data of good quality. The well was drilled with Seawater and hi-vis sweeps down to 1406 m, with Performadril Water based mud from 1406 m to 2286 m, and with XP-07 oil based mud from 2286 m to TD.

Both the primary Lange sandstone target at 4079 m and the secondary Lysing sands at 3395 m were non-commercial oil discoveries. The primary target Lange sands were encountered 19 m deeper than prognosed (TVD) and were 56 m thick with a net sand value of 2.4 m. The permeability encountered was less than anticipated due to diagenesis. The secondary Lysing sands were 37 m deeper than prognosed (TVD) with net sands approximately 2 m. The only shows reported from the well were from the target Lysing and Lange reservoir sections.

Three cores were cut from 4086 m to 4138 m in the Lange sandstones with 97% recovery. Success case wire line logging programs were run across both targets including a dual packer mini DST across the most promising zone (4102-4103 m) in the Lange sandstones. The result indicated sub-commercial permeabilities. Two good MDT pressure measurements were achieved in the Lysing Formation, giving a gradient of 0.059 bar/m. Fluid samples acquired at 3457.5 m confirm this to be an accurate oil gradient. MDT pressure samples in the Lange sandstones did not give a realistic gradient. However, fluid samples taken at 4102.1 m - although highly contaminated by mud filtrate - confirmed the presence of oil.

The well was permanently abandoned on 26 March 2012 as a minor oil discovery.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6406/3-9