



Wellbore History

GENERAL

Well 15/12-13 is located ca 0.8 km northwest of the 15/12-12 (Varg South) Discovery well. The primary objective was to appraise this discovery: to define the oil/water contact, measure current reservoir pressure and fluid gradients, confirm reservoir quality and geometry, and confirm geophysical model in terms of depth to top and base reservoir. Potential Kimmeridgian Sandstone immediately above the main Oxfordian reservoir was seen as secondary objective. The well bore 15/12-13 encountered the Oxfordian sandstones (Intra Heather Formation sandstone) 105 m deeper than the prognosed reservoir, and below the OWC. Since the objective of this well was not met well 15/12-13 A was drilled as a geological sidetrack to 15/12-13. Well 15/12-13 was abandoned in the Rogaland Group due to hole instability problems, and it was decided to drill a second sidetrack. This sidetrack had target approximately 350 m to the northwest of 15/12-12.

OPERATIONS AND RESULTS

Appraisal sidetrack well 15/12-13 B was spudded with the semi-submersible installation West Alpha on 17 May 2003. Kick-off was at 1345 m in 15/12-13. It was drilled to TD at 3151 m in the Triassic Sleipner Formation. The well bore was drilled with Sodium silicate (Barasil CX)/KCl/glycol mud.

A total of 134 m MD (128 m TVD) of Kimmeridgian to Late Oxfordian reservoir (2958 m to 3092 m MD) was penetrated in well 15/12-13 B. The oil/water contact was established at 3061.3 m (2964 m TVDSS), and the gas/oil contact at 3027.5 m (2931 m TVDSS). The reservoir was found to be pressure depleted, most likely due to production from the Varg Field, and the gas/oil contact had moved downwards from 2912 m TVDSS in well 15/12-12 (drilled in 2001).

No conventional core was cut. The MDT tool was run for pressure measurements and fluid sampling. Gas was sampled at 3010 m, 3017 m, 3021 m, and 3024 m. Oil was sampled at 3028.5 m. After completion of the logging program, the well was permanently abandoned on 11 June 2003 as an oil and gas appraisal.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 15/12-13 B