



Wellbore History

GENERAL

Well 6305/8-2 was drilled to appraise the southern part of the Ormen Lange Field in the Sothern Norwegian Sea. The objective of well 6305/8-2 was to delineate the field to the south, as it was unclear whether the area was optimally drained or not by existing production wells.

OPERATIONS AND RESULTS

Appraisal well 6305/8-2 was spudded with the semi-submersible installation Transocean Barents on 24 September 2014 and drilled to TD at 3078 m in the Late Cretaceous Springar Formation. No significant problem was encountered in the operations. The well was drilled with seawater and bentonite sweeps down to 1499 m, with KCl/polymer/glycol mud from 1499 m to 2897 m, and with Innover NS oil based mud from 2897 m to TD.

Top of the Egga Informal Formation Reservoir was encountered at 2906.5 m 23.5 m deeper than prognosed. Below Egga from 3005 to 3015 m an undifferentiated unit was penetrated before entering the Maastrichtian age Jorsalfare Formation. The Egga contained a 28-metre gas column down to a current GDT at 2936.0 m, and an underlying water zone with very good reservoir quality. The water zone in the lower part of Egga has extreme core permeabilities in the several Darcy range, often exceeding five Darcy. Below the GDT, the interpretation indicated a swept zone down to ca 2950 m followed by a residual gas zone down to ca 2969 m. All sands are fully water bearing below this depth. Both the undifferentiated unit and the Jorsalfare Formation were aquiferous with very good and poor to very good reservoir quality, respectively. The water zone is 70 metres in total. Wireline pressure measurements show depletion due to production in the D-template area. Pressure depletion relative to the closest exploration well 6305/7-1 vary from a high of 88.5 bar to a low of 7.4 bar.

Four consecutive cores were cut from 2898 to 3006.5 m, from the shale unit above the reservoir and down through the whole of Egga. MDT water samples were taken at 2991.7 m in Egga and at 3012 m in the underlying undifferentiated unit.

The well was permanently abandoned on 21 November 2014 as a gas appraisal well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6305/8-2