



Wellbore History

GENERAL

The Ormen Lange appraisal well 6305/4-2 S was drilled within the DHI limits in the NW of the Ormen Lange field in the Norwegian Sea. The main objectives were to appraise the fluid content and reservoir quality of the Egga Reservoir Unit (Egga informal Formation), and to investigate the degree of pressure communication between the planned northern area C-template and the existing central area A-and B-templates

OPERATIONS AND RESULTS

Appraisal well 6305/4-2 S was spudded with the dynamic positioning drilling vessel West Navigator on 4 November 2010 and drilled to TD at 2985 m (2905 m TVD) in the Late Cretaceous Nise Formation. Ormen Lange appraisal well 6305/4-2 S encountered challenges while drilling the deeper sections. Some cavings were observed in the 17.5" section through Brygge Formation. TD was therefore called shallower due to a rump up in pore pressure. Tight spots and cavings were also observed while drilling the 8.5" section. During the first wire line 8.5" logging run, the string became differentially stuck and fishing operations were required to retrieve the string. The well was drilled with seawater/PHB sweeps and displacement mud down to 1738.5 m and with Aqua-Drill Deepwater mud from 1738.5 m to TD.

Top of the Egga Reservoir Unit was encountered at 2835 m (2768.3 m TVD), 2.7 m shallow to prognosis. The base was penetrated at 2864 m (2794.5 m TVD) giving 27.3 m TVD gross reservoir. Of this 22.7 m TVD was net reservoir. The reservoir properties were as prognosed; average porosity and permeability was 27% and 261.5 mD respectively. The reservoir was water bearing and the pressure (298.4 bar) indicated high pressured water, most likely marginally depleted, and supported a hydrodynamic aquifer model. The results confirmed the interpretation of the seismic Direct Hydrocarbon Indication (DHI) in the area as a paleo-gas/water contact (i.e. DHI is not the current field outline).

A total of 42.94 m of cores were cut in three cores. Cores 1 and 2 were cut in the interval 2844 m to 2901.5 m and core 3 from 2879 m to 2901.5 m. The overall recovery was 98.7%. No wire line fluid samples were taken. Seventy-three mud gas samples were captured in isotubes.

The well was permanently abandoned on 11 February 2011 as a dry well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6305/4-2 S