



Wellbore History

GENERAL

Well 6305/8-1 was a joint appraisal well on the Ormen Lange discovery between licences 208, 209 and 250. It was committed to test the reservoir potential of the Tertiary sequence in licence 250. The main target was a sand ("Egga Member") in the Tang Formation. The exploration objectives of the well were to appraise the 6305/5-1 Ormen Lange gas discovery, to test the hydrocarbon potential, type of hydrocarbons and seal in a secondary target Miocene Channel feature, and to improve biostratigraphic control in the area. In addition, the well was designed to provide a variety of information required for development planning of the Ormen Lange discovery.

OPERATIONS AND RESULTS

Appraisal well was spudded with the semi-submersible installation Scarabeo 5 on 13 July 2000 and drilled to a total depth of 3175 m in the Late Cretaceous (Campanian & Late Santonian) Nise Formation. No problems were experienced drilling through the ooze sequence. The well was drilled with bentonite spud mud down to 942 m. A water based mud type based on NaCl brine with glycol additives was used from 942 m to TD. No potential reservoir sandstone was encountered in the Miocene channel sequence, penetrated at 1653 m. The Egga reservoir sandstone was penetrated approximately 20 m higher than prognosed at 2898 m. A gas column of approximately 20 m was penetrated in the well. Below the gas was a thin 2-5 m oil leg, which was not prognosed. The oil was confirmed by MDT sampling, and geochemical analyses indicated that the oil is sourced from a comparatively immature source rock. The gas/oil/water contact was found at 2921.5 m. The upper part of the Egga Member, from 2900 m to 2935 m, was a loose sand interbedded with thin claystone beds. The lower part of the Egga reservoir unit consisted of a more massive sand sequence down to approx. 2950 m. The Jorsalfare Formation consists of interbedded sands and mudstones. Good quality water, oil and gas samples were collected in the reservoir. The entire reservoir in the well was cored: Five cores were cut through the Våle (Egga Member) and Jorsalfare Formation sandstones from 2895 m to 2989 m. Core recovery was excellent (92 %- 100 %). Several MDT samples containing oil and gas were recovered from sampling points at 2923.5 m, 2922 m, 2919.6 m, 2914 m and 2908.2 m. MDT water samples were recovered from sampling points 2980.5 m, 2945 m and 2942.6 m. The well was plugged and abandoned as an oil and gas appraisal well on 8 September 2000.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6305/8-1