



Wellbore History

GENERAL

Well 6305/5-3 S was drilled on the north-eastern flank of the Ormen Lange Field in the Norwegian Sea. The well had three objectives: to appraise the Egga Reservoir Unit and Springar Formation for fluid content and reservoir quality; to investigate the extent of pressure communication between the C-Template area and the A- and B -Template area within the Egga Reservoir Unit; and to test possible hydrocarbon potential in the overlying Tare Formation

OPERATIONS AND RESULTS

Appraisal well 6305/5-3 S was spudded with the semi-submersible installation Leiv Eirikson on 19 August 2009 and drilled to TD at 2954 m (2837 m TVD) in the Late Cretaceous Springar Formation. Due to junk in the hole when drilling out of the 20" a technical sidetrack was made (6305/5-3 ST2); otherwise operations went forth without significant problems. The well was drilled with seawater and hi-vis pills down to 1651 m and with Glydril mud from 1651 m to TD.

Top of the Egga Reservoir Unit was encountered at 2797 m (2693.9 m TVD) and was 31 m TVD thick. This was 27 m deeper and 6 m thinner than prognosed. Pressure testing and down hole fluid analysis established the GWC to within 1.9 m. The Gas-Down-To (GDT) was determined at 2678.7 m TVD MSL and the Water-Up-To (WUT) at 2680.6 m TVD MSL. This is about 176 m shallower than the DHI in segment 3. The net/gross came in on the lower end of the prognosis, while the porosity was close to the prognosed. The pressure of the Egga gas-leg was some 3 bar lower than the virgin Ormen Lange gas pressure at this depth, indicating depletion and hence connectivity to the producers of the A and B templates. The Springar and Tare Formation reservoir properties proved to be very poor and no hydrocarbon saturations could be determined.

Sidewall cores were taken, but no conventional coring was done. MDT fluid samples were obtained at 2805 m (gas zone), 2812.4 m (water zone) and 2837 m (water zone). Sampling showed that the water-bearing interval had gas below the GWC.

The well was suspended on 27 October 2009 as a gas appraisal.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6305/5-3 S