



Wellbore History

GENERAL

Well 6407/1-6S was drilled on the Rodriguez prospect on the Halten Terrace in the Norwegian Sea. The primary objective was to test the Garn Formation with upside potential in the Ile Formation. Secondary objective was to test high amplitudes observed in the Lange Formation and to improve the regional understanding of the Cretaceous play.

OPERATIONS AND RESULTS

Wildcat well 6407/6-1 S was spudded with the semi-submersible installation Transocean Arctic on 7 December 2012 and drilled to TD at 4250 m (4075 m TVD). A 12 1/4" pilot hole was drilled from 393 m to 1003 m without any indication of shallow gas. The well was drilled with an S-shaped path that is vertical down to 2330 m, deviated from there to ca 3830 m and vertical again to TD. No significant problem was encountered in the operations. The well was drilled with spud mud down to 396 m, with KCl mud from 396 m to 1003 m, with Performadril mud from 1003 m to 3091 m, and with oil based XP-07 mud from 3091 m to TD.

Gas/condensate was encountered in several overpressured intra Lange sandstones in the interval 3460 m to 3530 m. No water contact was found. The sandstones had an average porosity of 18% using a porosity cut-off of 8%. The reservoir has a net to gross of 0.171 and an average Sw of 0.276. The Middle Jurassic Garn Formation and Ile Formation were dry with no shows and gas readings of approximately 0.4%. The Garn Formation was 119 m thick, 29 m thicker than prognosed.

No cores were cut in the well. The RCX tool was run for pressure and fluid samples. In the Intra Lange Sandstones, the pressure was 511 bar and two fluid samples were taken at 3463.65 m and 3461.5 m. The samples showed gas-condensate with a GCR of 1852-2188 Sm³/Sm³ and 1.5% CO₂. Pressure measurements in the Garn Formation proved a water gradient close to hydrostatic pressure. The maximum temperature at well TD was 150 °C, measured on wireline 23 hrs after last circulation.

The well was permanently abandoned on 24 January 2013 as a gas/condensate discovery.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6407/1-6 S