

Wellbore History

GENERAL

Well 6407/8-5 A is a sidetrack to well 6407/8-5 S on the Gygrid prospect situated 7 km west of the Draugen Field in the Norwegian Sea. The main well 6407/8-5 S found oil without gas cap in the Tilje Formation. The target of the sidetrack was to explore the hydrocarbon bearing Tilje Formation up-flanks on the structure.

OPERATIONS AND RESULTS

Appraisal sidetrack well 6407/8-5 A was drilled with the semi-submersible installation West Alpha. The side track started on 30 May 2009 with milling a window through the 9 5/8" liner from 2412 m to 2415.2 m. A whip stock was set at 2419.5 m MD and the new section started from 2420 m MD, and was drilled down to Early Jurassic Tilje Formation at the deepest and then back up to Early Cretaceous, Kvitnos Formation with final TD at 3231 m (2011 m TVD). The well bore was drilled with Versatec oil based mud from kick-off to TD.

The sidetrack proved a 38 m oil column with an OWC at ca 2040 m TVD in the Ile Formation and a 98 m oil column with an OWC at ca 2151 m TVD in the Tilje Formation. No gas cap was seen in the reservoirs. The combined pressure data from the main well and the sidetrack showed that the water gradient in Ile and Tilje have a pressure difference of approximately one bar. This indicates that the Ror Formation act as a pressure barrier. Both water gradients have slightly higher pressure than the initial pressure on Draugen. Draugen has been producing for 16 years, and pressure depletion would have been expected if Gygrid was in communication with Draugen. Thus no communication is expected and Gygrid is most likely at initial pressure. No shows above the OBM were seen in the well.

No cores were cut in the well bore. MDT oil samples were taken at 2999 m in the Tilje Formation and at 3169 m in the Ile Formation.

The well was permanently abandoned on 13 June 2009 as an oil appraisal well.

TESTING

No drill stem test was performed.