

Wellbore History

GENERAL

Well 16/4-7 was drilled on the Biotitt prospect, a structural trap located some 30 km south of the Edvard Grieg field on the Utsira High in the North Sea. The well was drilled about 0.5 kilometres west of well 16/4-4, which penetrated down to the Late Cretaceous Tor Formation and found gas and condensate in the Early Paleocene Ty Formation. The primary objectives of well 16/4-7 was to prove petroleum deeper down on the structure, in Jurassic Intra-Heather or Hugin Formation sandstones. The well was planned to drill into Triassic strata.

OPERATIONS AND RESULTS

Wildcat well 16/4-7 was spudded with the semi-submersible installation Bredford Dolphin on 23 July 2013 and drilled to TD at 2600 m in the Triassic Skagerrak Formation. No shallow gas was seen while drilling the top hole sections including the 9 7/8" pilot hole. The 12 1/4" section suffered from overall low efficiency due to power generation issues on the rig and a main engine cam shaft breakdown. The well was drilled with seawater and hi-vis sweeps down to 758 m and with Performadril water based mud with glycols from 758 to TD.

Ty Formation sandstones were encountered as prognosed at 2266 m with a gross thickness of 47.5 m. It was dry without shows. The target Jurassic sandstone reservoir was encountered at 2489 m. These sandstones are of Kimmeridgian age and belong to the Ula Formation rather than the Hugin Formation. The reservoir was of excellent quality, but was water-filled with only very weak visible oil shows seen in two sidewall cores. The thickness of the Ula Formation was 40 m. Skagerrak Formation sandstones with good reservoir quality were found unconformably underlying the Ula Formation with very weak oil shows seen in a sidewall core taken at the top of the formation. Post well geochemical analyses of the three weak shows proved only trace amounts of hydrocarbons that might be related to contamination.

No cores were cut. No fluid samples were taken

The well was permanently abandoned on 21 August as a dry well.

TESTING

No drill stem test was performed.