



Wellbore History

GENERAL

Well 2/5-13 was drilled on the Steinbit Terrace in the North Sea. The objective of the well was to test the hydrocarbon potential in the Verona prospect, with the Ula Formation as the primary target, and the Bryne/Skagerrak fm's sandstones as the secondary target.

OPERATIONS AND RESULTS

Wildcat well 2/5-13 was spudded with the jack-up installation West Epsilon on 25 September 2008 and drilled to TD at 4675 in Late Triassic, Carnian age sediments of the Skagerrak Formation. The well started with a 36" hole down to 224 m followed by a 9 7/8" pilot hole down to 953 m. No shallow gas was observed by the ROV or by the MWD in the pilot hole. The rig had 21 days down time after completion of the well due to bad weather. Also, problems with obtaining good pressure test on the 9 7/8" liner hanger at 4211 m caused 77 hours down time. The well was drilled with spud mud down to 953 m and with XP-07 oil based mud from 953 m to TD.

The well penetrated rocks of Quaternary, Tertiary, Cretaceous, Jurassic, and Triassic age. No Ula Formation reservoir sandstone was present in the well. This was confirmed by biostratigraphic analysis. The secondary objective sandstones of the Bryne and Skagerrak Formations were however penetrated. Top Bryne Formation was found at 4525 m, 37 m shallower than prognosis, whereas Top Skagerrak Formation was found at 4567 m, 15 m deeper than prognosis. No hydrocarbons were proven in the well. No oil shows were observed in the cuttings. A pore pressure of 2.03 g/cm³ was measured at 4531 m, close to the top of the reservoir, with the LWD formation pressure tool.

No cores were cut and no wire line fluid samples were taken.

The well was completed on 21 January 2009 as a dry well. The rig waited on weather for 21 days, up to 14 February, before it could move off location.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 2/5-13