



Wellbore History

General

Well 7121/9-1 was drilled on the Zapffe prospect in the southern part of the Hammerfest Basin, ca 19 km west of the Goliat Field. The objective was to prove petroleum in Late Jurassic and Early Cretaceous reservoir rocks (Knurr and Hekkingen formations).

Operations and results

Wildcat well 7121/9-1 was spudded with the semi-submersible installation Aker Barents on and drilled to TD at 2458 m in Middle Jurassic sediments of the Kapp Toscana Group. A 9 7/8" pilot hole was drilled from 413 m to 855 m to check for shallow gas. No shallow gas was seen. Total rig time for the well was 47.8 days, of which 15.6 days (32.6%) were counted as non-productive time. The two main causes for the NPT were problems with cement at the 13 3/8" casing shoe (6.8 days) and WOW (3.2 days). The well was drilled with seawater and bentonite down to 855 m and with Glydril mud from 855 m to TD.

The well encountered top Knurr Formation at 1809 m with considerably thinner reservoir rocks and with poorer reservoir quality than expected. The Knurr Formation contained a hot-shale in the lower part with high gamma ray and up to 9 % TOC from 2027 to 2034 m. The Hekkingen Formation was encountered at 2018 m with the typical high gamma ray/high TOC Alge Member at its base, from 2292 m to 2318 m. There was no reservoir rock in the Hekkingen formation. Weak oil shows (weak, mostly blue-white direct and cut fluorescence) in sidewall cores from sandstone in the Knurr Formation and shales in the Hekkingen Formation.

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

The well was permanently abandoned on 29 November 2011 as a dry well.

Testing

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7121/9-1