

Wellbore History

GENERAL

Well 6306/6-1 was drilled on the Frøya High in the Møre I area off shore southern Mid Norway. The main objective was to prove HC accumulations in Late Jurassic Rogn Formation sandstones, the A-prospect.

OPERATIONS AND RESULTS

Wildcat well 6306/6-1 was spudded with the semi-submersible installation Ross Rig on 22 June 1994 and drilled to TD at 1317 m in basement rocks. No significant problems were encountered in the operations. The well was drilled with bentonite and seawater down to 432 m and with KCl/PAC mud from 432 m to TD.

The Paleocene Egga sandstone unit was encountered at 604 m. The sandstones were rather silty; partly calcite cemented, and with reduced porosity due also to the presence of mica and glauconite. A 93 m thick Rogn Formation sandstone unit came in at 1158 m, sandwiched in Spekk Formation shales above and below. Under base Spekk a sequence of Middle Jurassic age (Fangst Group) was penetrated from 1267 m to 1281 m. Sandstones with occasional interbeds of claystone/shale grading to coals dominated this sequence. No shows were recorded in any section of the well while drilling, and since only questionable sandstone extracts were found in post-well organic geochemical analyses the well is concluded as dry. Very good source rocks are present in the well. The best source rock is seen in the upper Spekk section, which contain a typically marine anoxic, oil-prone Type II kerogen. The lower Spekk section has higher TOC, but is more terrestrial in composition and thus more gas/condensate -prone. Also the coaly shales and coals of the Middle Jurassic have very good potential for mixed oil and gas. The well is however immature all through with a vitrinite reflectance of about 0.45 % Ro at TD.

One FMT run was performed in the Rogn Formation sandstone. Six pressure points gave a water gradient of 1.002 g/cm3. No fluid sample was taken.

The well was permanently abandoned on 5 July as a dry hole.

TESTING

No drill stem test was performed.