

Wellbore History

GENERAL

Wildcat well 6610/2-1S is located in the Nordland III area off shore Northern Norway. The main objective was to test the hydrocarbon potential in Middle and Early Jurassic Sandstones of the Fangst and Båt Groups.

OPERATIONS AND RESULTS

Wildcat well 6610/2-1S was spudded with the semi-submersible installation Byford Dolphin on 27 August 1996 and drilled to TD at 2673 m in the Triassic Red Beds. The hole was drilled vertical down to 938 m and deviated from that point to TD, with deviation mostly around 24 - 26 deg. No significant problems were encountered in the operations. The well was drilled with spud mud down to 946 m and with ANCO 2000 mud from 946 m to TD.

A Lysing Formation sandstone was penetrated from 2050 m to 2067 m. At 2067 m a large hiatus from the Early Jurassic Pliensbachian to the Late Cretaceous Coniacian was encountered. The Tilie Formation was mostly silt and mudstone, while the Are Formation contained up to 50 m thick sandstone units. All potential reservoir sections in the well were found water wet. The top sand in the Lysing Formation had shows. These were recorded conventionally on cuttings and a core on the rig and confirmed by later geochemical analyses on shore. The geochemical analyses also detected shows in the Tare, Tilje, and Åre Formations. The analyses also detected use of an oil-based additive in the mud below 2063 m. This was not reported in the mud programme. This additive, together with the polyethylene glycols of the ANCO 2000 mud system, hampered interpretations of the geochemical data, particularly in sections with low levels of organic matter. However, it was established that the well is immature all through to TD, and that the best source rock intervals in this well were the coals (and coaly shales) in the Jurassic Are Formation. The potential of Are is for gas generation. The Tertiary Brygge and Tang Formations also had a fair source potential for gas.

One core was cut in the Lysing Formation, and two in the Åre Formation. No Fluid samples were taken.

The well was permanently abandoned on 28 September 1996 as a dry hole with shows

TESTING

No drill stem test was performed.