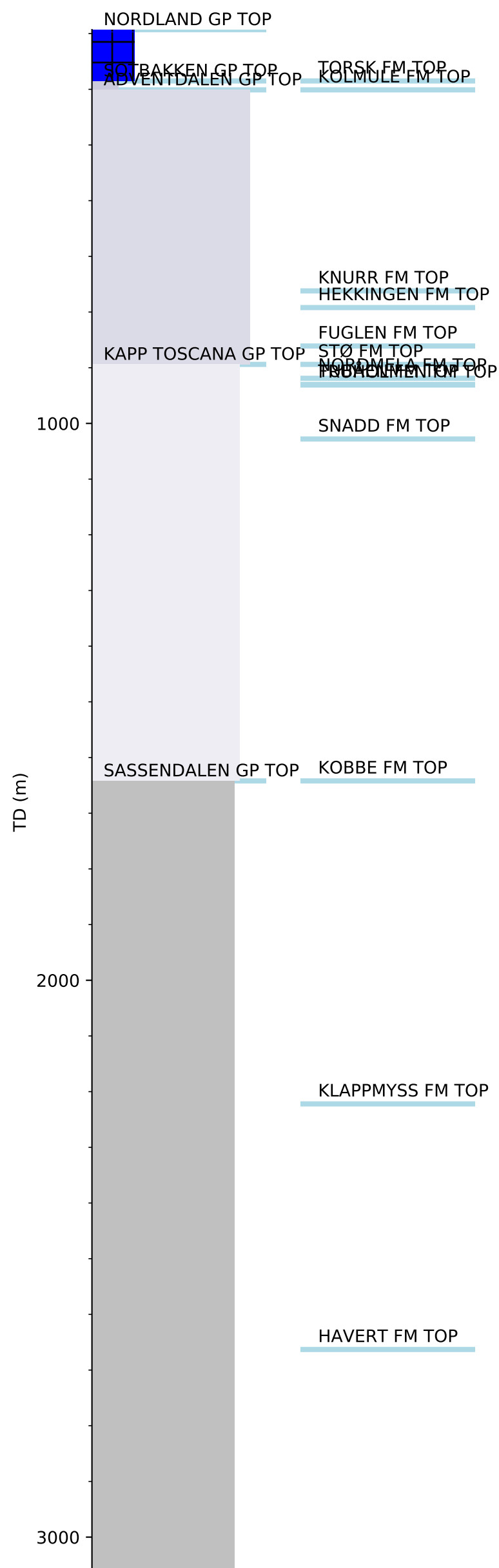


Formation Tops

Wellbore History



GENERAL

Well 7224/7-1 was drilled in Lopparyggen Øst area on the Bjarmeland Platform. The hole was drilled on the Samson Dome structure with closure on all pre-Oligocene levels. The well was designed to test sandstone reservoirs of Early Jurassic/Late Triassic and Early Triassic ages and carbonaceous rocks of Permian age. In addition, the well was to test the geophysical and structural interpretation, and improve the geological, geochemical and paleontological understanding of a new area in the Barents Sea. Planned TD was originally at 4400 m, into Permian carbonates. However, as the result from well 7226/11-1 about 70 km further east turned out to be negative regarding the Permian rocks, it was decided to reduce TD to 3200 m.

OPERATIONS AND RESULTS

Wildcat well 7224/7-1 was spudded with the semi-submersible rig Ross Rig 13 April 1988 and drilled to TD at 3067 m in Triassic rocks. During drilling Statoil reported increasing pressure and relatively high connection gas readings. At 2352 m gas flowed in from the formation. During further drilling the pore pressure increased to 1.48 SG in the formation at 2621 m, and Statoil decided to stop drilling and set casing at 2658 m. The 9 5/8" casing was set at 2644 m. Further drilling to TD went without significant problems. The well was drilled with seawater and hi-vis pills down to 664 m and with Newdrill polymer / Drispac from 664 m to TD. There was no shallow gas in the hole.

Middle Jurassic sandstone (Stø Formation) came in at 894 m. Jurassic/Late Triassic reservoir section had good reservoir quality. In the Triassic section several minor sand zones of Anisian age in the Kobbe formation was penetrated. Bottom Smithian sandstone (Klappmyss), prognosed at 2730 m, was not encountered as expected. Shows were recorded in the Stø, Nordmela and Tubåen formations from 894 m to 931 m, but logs and RFT tests showed that the sandstones were water bearing. The petrophysical evaluation indicated that the section from 1660 to approximately 1775 in the Kobbe Formation was gas bearing, and shows were recorded from 1658 m to 1784 m, 1856 m to 1871 m, and 1922 m to 2027 m. However, analysis from core and RFT measurements showed that the formation had very poor to no permeability. Three cores were cut in Early Jurassic-Late Triassic (Stø, Nordmela and Tubåen formations), and two in Middle Triassic rocks (Kobbe Formation). One RFT fluid sample was taken in the Stø Formation at 902 m. It contained water. In the Kobbe Formation four successful formation pressures out of 26 attempts, and one set of gas samples were achieved by the RFT.

After expected reservoir level was penetrated without encountering reservoir sand, Statoil requested to stop further drilling. The well was plugged and abandoned on 19 June 1988 with shows.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7224/7-1