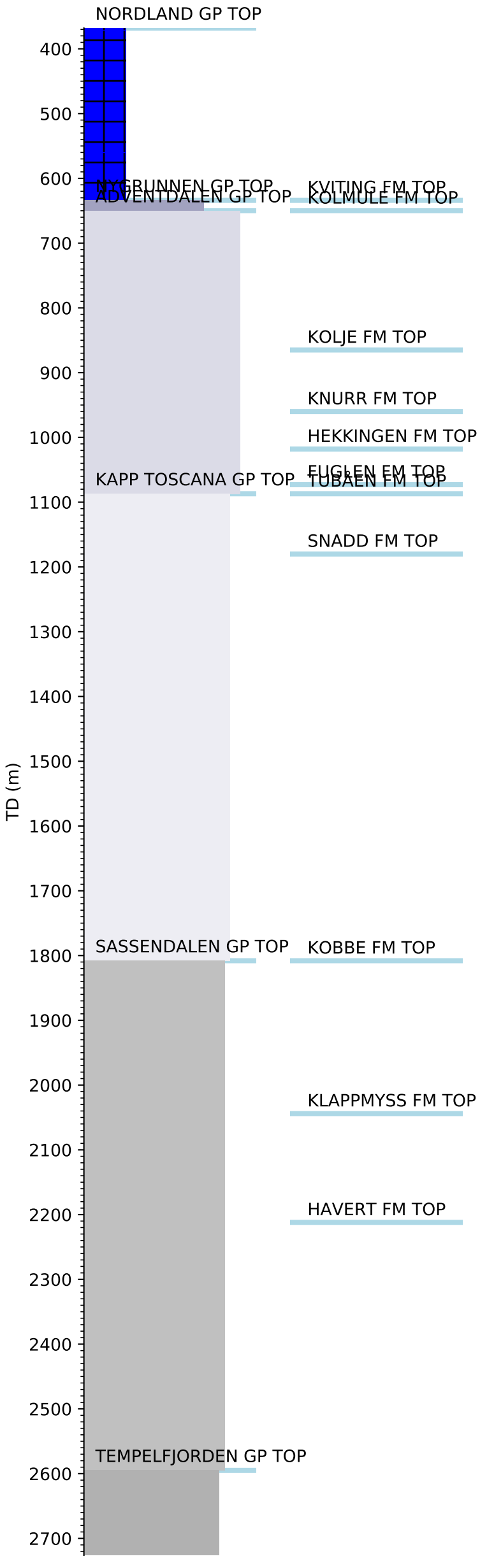
Groups

Formation Tops



Wellbore History

GENERAL

Well 7122/7-3 was drilled on the Goliat Field, which is located approximately 55 km to the south-east of the Snøhvit Field. The Goliat structure is located on the crestal part of a major northeast-southwest trending roll-over anticline situated in the southeastern part of the Hammerfest Basin, along the Troms-Finmark Fault. The primary purpose of the well was to appraise the hydrocarbon potential of the Early Jurassic / Late Triassic (the 7122/7-1 Goliat Discovery). The secondary purpose was to test the potential throughout the Triassic and Late Permian. Permian was the drilling commitment for the licence.

OPERATIONS AND RESULTS

Well 7122/7-3 was spudded with the semi-submersible installation Eirik Raude on 24 October 2005 and drilled to TD at 2726 m in limestone/claystone of the Late Permian Røye Formation. No serious problem was encountered in the operations. The well was drilled with seawater/high viscous sweeps with pre-hydrated bentonite mud down to 538 m and with K/Na Format Polymer mud from 538 m to TD.

The top of the Tubåen reservoir was found at 1087 m, 5 m deeper than prognosis. The reservoir had a gas cap with a GOC at 1145.6 m and oil below. No OWC was found. Top Snadd Formation reservoir was encountered at 1180 m, 23 m shallower than prognosis. The reservoir was oil bearing with a true OWC at 1199.5 m and was in a pressure regime different from the Tubåen reservoir pressure. The third reservoir was found in the Kobbe Formation at 1808 m, 29 m shallower than the prognosis. The reservoir was oil bearing. Oil was confirmed down to 1875.3 m by MDT fluid scanning, and the oil water contact was interpreted to be at 1878 m based on intersection between oil and water gradients.

The Kobbe Formation oil differs from the upper Tubåen and Snadd oils, which are geochemically very similar. The Kobbe oil is not biodegraded while the upper oil reservoirs are slightly biodegraded (removal of C8 ? C15 n-alkanes, but intact C15+ n-alkanes). Other geochemical differences, such as a very light stable carbon isotope composition in the Kobbe oil compared to the upper oils, indicate that the Kobbe oil and the upper oils have different source rocks.

Seven cores were cored in the well. Cores 1 and 2 were cut from 1082 to 1104 from the Late Jurassic Fuglen Formation and into the Late Triassic Kap Toscana Group, core 3 was cut from 1146.5 to 1156 m in the Kap Toscana Group, core 4 was cut from 1187 to 1192 m in the Late Triassic Snadd Formation, cores 5 and 6 were cut from 1812 to 1836 m in the Middle Triassic Kobbe Formation, and core 7 was cut from 2519 to 2521 m in the Early Triassic Havert Formation. MDT fluid samples were taken at 1095.3 m (Tubåen Formation ; gas), 1148.5 m (Tubåen Formation; oil), 1195.6 m (Snadd Formation; oil), 1202.1 m (Snadd Formation; water), 1812 m (Kobbe Formation; oil), 1874.5 m (Kobbe Formation; oil), and at 1931.2 m (Kobbe Formation; water).

The well was permanently abandoned on 8 January 2006 as a discovery well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7122/7-3