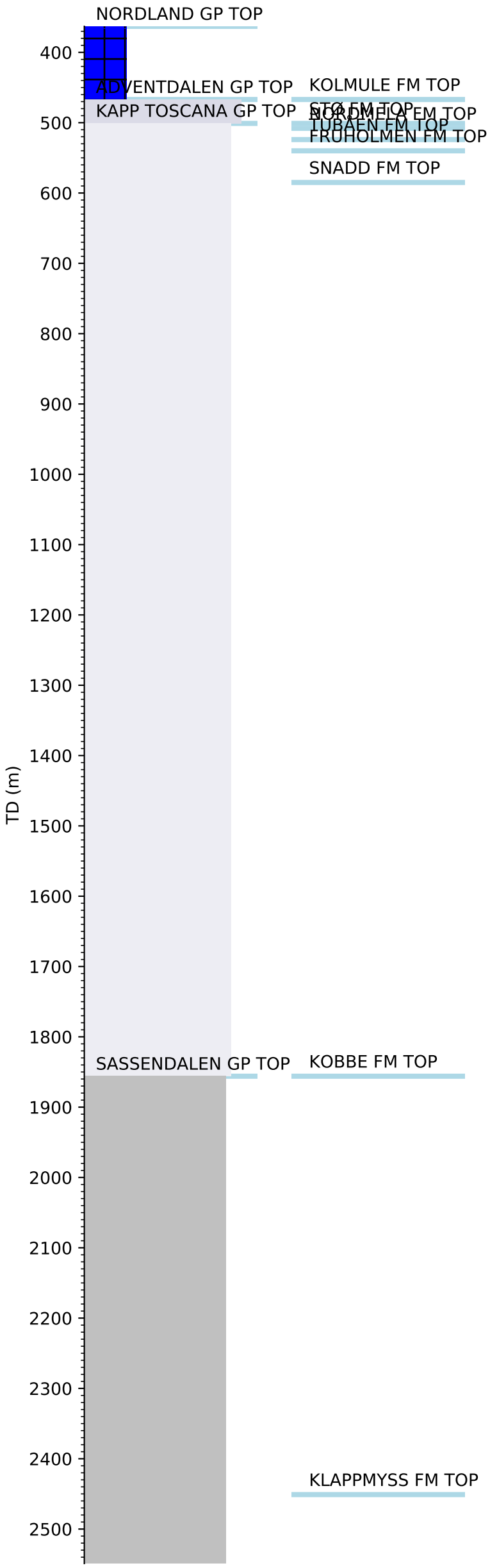
Groups

Formation Tops



Wellbore History

GENERAL

Well 7223/5-1 was drilled on the Bjarmeland Platform, south of the Swaen Graben, east of the Loppa High in the Barents Sea. The primary objective was to prove oil or gas in a new segment of Ladinian channel complex in the Obesum prospect. The location was chosen in order to test several plays and seismic amplitude anomalies in the Triassic Snadd and Kobbe Formations, and to avoid shallow gas anomalies.

OPERATIONS AND RESULTS

A 9 7/8" pilot hole was drilled to 607 m to check for shallow gas. Some sands were penetrated, but no signs of shallow gas were seen. Well 7223/5-1 was spudded with the semi-submersible installation Polar Pioneer on 4 December 2008 and drilled to TD at 2549 m in the Early Triassic Klappmyss Formation. A leakage on the BOP control system was discovered while drilling the 12 1/4" section. The BOP and riser was pulled and repaired; this took 75 hrs. Otherwise no significant technical problem occurred. The well was drilled with seawater/CaCl2/Polymer mud down to 602 m and with Glydril WBM from 602 m to TD.

The Snadd Formation was encountered at 585 m and was 1271 m thick. The underlying Kobbe Formation was encountered at 1856 m and was 595 m thick. Hydrocarbons (gas) were observed in Snadd Formation in fluvial sandstones of Ladinian age and in the Kobbe Formation in sandstones of Anisian age. A lower Snadd Formation reservoir penetrated at 1575 m had 60 m gross sandstone with 17 m net gas bearing reservoir, but gas saturation was probably very low. Several sandstone intervals in the Kobbe Formation contained gas but the reservoirs were of very poor quality. Oil shows in the form of fluorescence were recorded at several levels in the Kobbe Formation.

Two cores were cut in the intervals 1579-1595 m in the Snadd formation and 1933-1946 m in the Kobbe formation. MSCT (Mechanical Sidewall Coring Tool) cores were also sampled during TD logging. In the Snadd Formation water and gas were sampled. A water sample was collected at 1584.6 m with dual packer after pumping of 242 litre of fluid. The sample had high contamination level of 14 %. At 1578.4 m gas samples were collected both with large diameter probe and dual packer. The drawdown with the probe was 40 - 45 bar, while with the dual packer a drawdown of approximately 0.9 Bar was observed. The water sample at 1590.3 m was collected with the single probe. The formation had poor reservoir properties and just a few litres were pumped. The sample contained mainly mud filtrate with a small fraction of formation water. In the Kobbe Formation gas samples were collected 1919.9 m. Due to poor reservoir properties the samples were collected with the dual packer. During the sampling a drawdown of approximately 18 Bar was observed.

The well was permanently abandoned on 5 December 2008 as a gas discovery.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7223/5-1