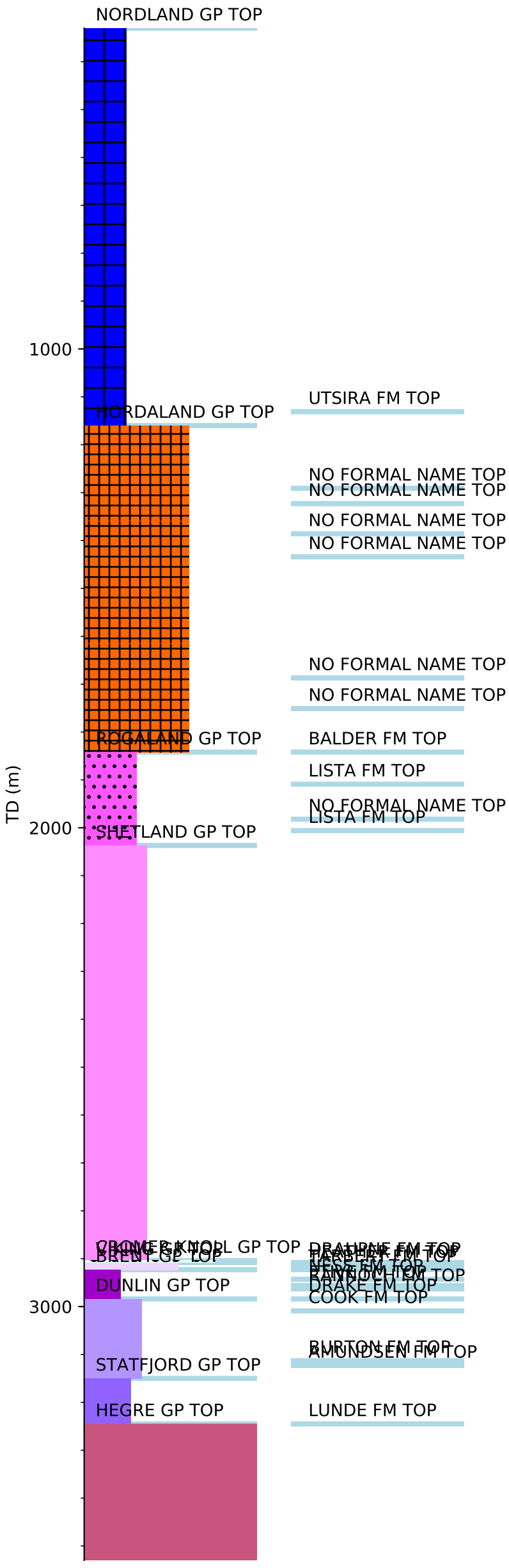

Wellbore History

GENERAL

Well 34/8-9 S is located on the A-structure on the Visund Field. This is a NNE-SSW oriented elongated fault block with the Pre-Cretaceous strata dipping towards WNW. The A-Central fault divides the A-structure into the A-North and A-South compartments. Well 34/8-9 S was drilled on the southern part of the A-South compartment. The primary objective was to establish the inferred OWC at 3100m TVD and confirm the pressure regime in the Statfjord and Amundsen Formations. The secondary objective was to determine the hydrocarbon potential of the Cook Formation in the structure. The well was designed deviated in order that both objectives could be fully evaluated. Furthermore the spud location of the well was chosen so that an optimal, up-dip, sidetrack could be drilled in order to appraise the Lunde A-south gas condensate discovery.

OPERATIONS AND RESULTS

Appraisal well 34/8-9 S was spudded with the semi-submersible installation West Delta on 25 October 1992. The first 36" top hole was abandoned because after casing was set due to drill string lost in hole. The rig was moved 28 m from first spud location and re-spudded. The rig downtime for this well amounted to 30% of the total rig time. Most of this was drilling equipment repairs and fishing for equipment, but no single event had any serious consequence for the personnel or the well objectives. The well was drilled to TD at 3530 m in the Late Triassic Lunde Formation. The well was drilled with seawater and hi-vis pills down to 1698 m and with HF-plus KCl/polymer mud from 1698 m to TD.

The Viking Group, Draupne Formation was encountered at 2903. 5 m (2873.5 m TVD). Weak source rock shows were recorded in these shales. The Brent Group was encountered from 2922.5 m to 2983.5 m (2889.5 m TVD to 2940 m TVD). From a gross Brent Group thickness of 61m a net sand thickness of 47 m was identified, with average porosity of 20.8 %. Wire line logs confirmed ca 11 m oil column with an OWC at 2931 m (2900.6 m TVD). RFT pressure tests suggested a free water level around 2933 m (2902.6 m). The Formation pressure in the Brent Group revealed two separate water regimes, approximately 2.1 and 2.8 bar lower than the established common Brent water gradient on the Visund Field. The pressure data showed two separate water regimes also in the Statfjord Formation, ca 1.3 and 2.0 bar lower than the common water gradient interpreted from wells 34/8-1 and 34/8-5.

The Cook, Statfjord and Lunde formations were all water wet. The Cook Formation had no shows, the Statfjord Formation had weak shows on the cores from 3170.5 m to 3196 m and the Lunde Formation had weak shows in the upper part from 3417 to 3426 m.

Six conventional cores were cut in the well. One core was cut in the Nordland Group (Utsira Formation), two cores were taken in the Brent Group, and one core was taken over the Amundsen/Statfjord Formation boundary. Further two cores were taken in the Statfjord Formation. Two RFT fluid samples were taken at 2926.3 m (11 l oil, 0.84 Sm3 gas, and 2.6 l water/filtrate), and 3156 m (water/filtrate).

The well was permanently abandoned on 28 December 1992 as an oil appraisal well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 34/8-9 S