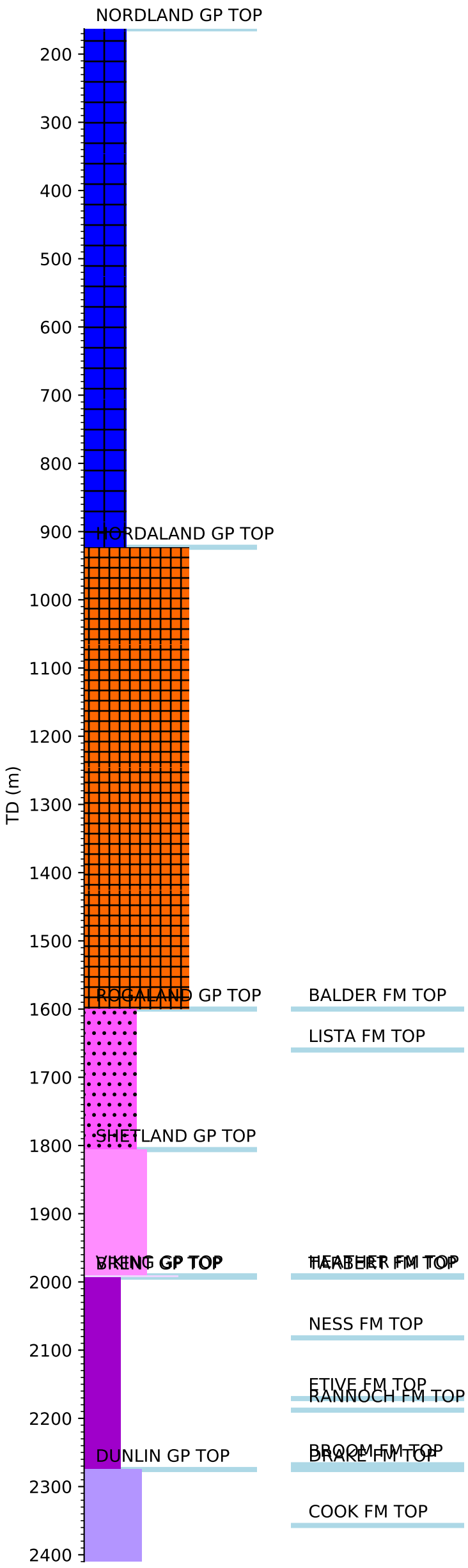
Groups

Formation Tops



Wellbore History

GENERAL

Well 34/10-34 was designed to drill the C6 structure west of the Gullfaks Field. Block 34/10 is situated in the Tampen Spur area and the 6C structure is an elongated, lens shaped rotated fault block dipping to the NW and bounded to the East and South by faults. At the well location the Heather Formation and uppermost Tarbert Formation have been eroded. The main objective of the well was to test the potential for hydrocarbons in the Brent Group sands west of the Gullfaks Field. No secondary prospects were defined.

OPERATIONS AND RESULTS

Wildcat well 34/10-34 was spudded with the semi-submersible installation Deepsea Bergen on 10 April 1991 and drilled to TD at 2410 m in the Early Jurassic Cook Formation. While drilling the 26" hole some indications of gas was detected on ROV sonar, but no gas was observed during hole opening. Apart from some problems with stuck pipe, drilling went without significant problems. The screen from the drill string dropped into the MWD tool, thus preventing pulses from arriving at the surface. Due to this MWD is missing from 1349 m to1675 m. The well was drilled with gel/CMC down to 795 m, with gypsum/PAC from 795 m to 1994 m, and with bentonite/Lignite from 1994 m to TD.

Spotted shows were observed in limestones in the interval 1558 m to 1678 m in the Hordaland Group, through the Balder Formation and into the upper part of the Lista Formation. The Viking Group was encountered at 1991 m and consisted of only two m of Heather Formation. The Tarbert Formation sandstones was encountered at 1993 m and proved oil. From electric logs and FMT pressure measurements the OWC was interpreted at 2013.5 m, with continuous oil shows on cores extending down to 2040 m. A weak oil show was observed in an SWC from the top of the Cook Formation sandstone at 2360 m. One segregated sample was taken at 2006.0 m. The sampling time for the 2-3/4 gallon chamber was 62.3 minutes and for the one-gallon chamber 34.8 minutes. The 2 3/4 gallon chamber contained 8 litres of oil and mud filtrate and 0.58 m3 gas and the one- gallon chamber contained 1.28 1itres oil and 0.122 m3 gas. A total of 271 m conventional core was recovered in eleven cores in the Brent Group (1995 m to 2273 m). Sixty sidewall cores were attempted and 52 were recovered.

The well was prepared for conversion to production well and suspended on 31 May 1991 as an oil discovery.

TESTING

One drill stem test was performed in the Tarbert Formation from the perforated interval: 1994 - 2001 m. The well produced 1545 sm3/d oil with a density of 0.860 g/cm3 at standard conditions and 135784 sm3/d gas with a relative density of 0.682 g/cc through a 48/64" (19.05 mm) choke.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 34/10-34