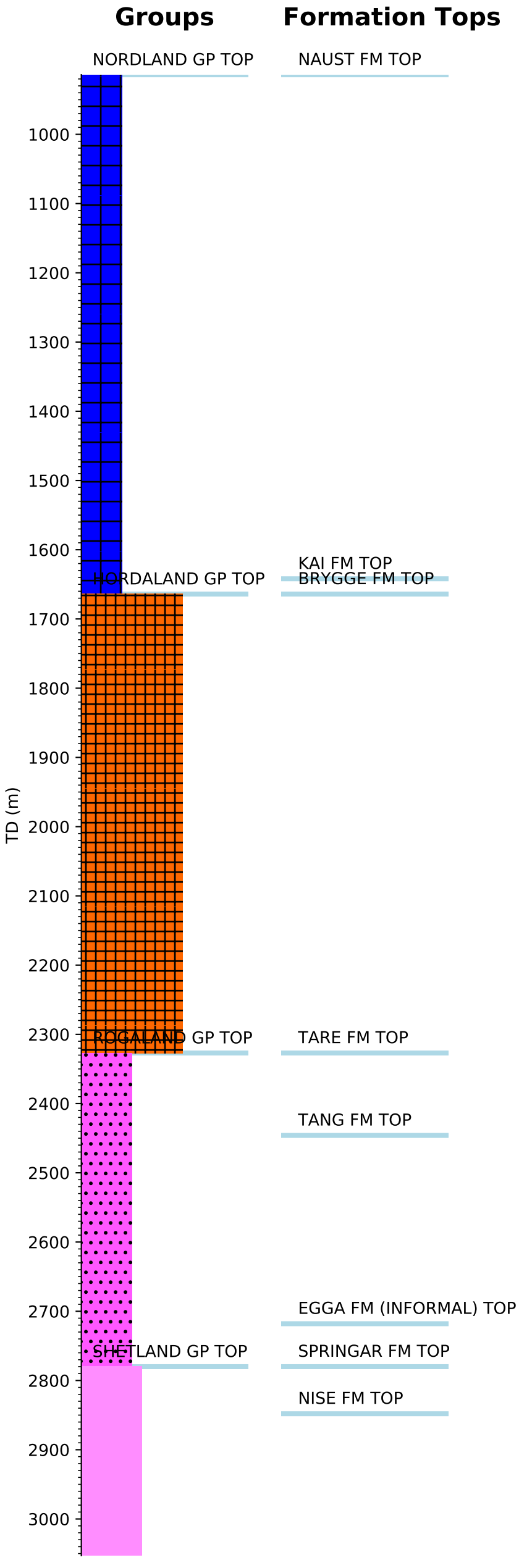

Wellbore History

General

Well 6305/5-1 was an exploration well which was committed to test the reservoir potential on the Tertiary sequence in the 209 license off shore Mid Norway. The targets were Paleocene, with a sand ("Egga Member") in the Tang Formation as the primary target. The objectives were to test the reservoir potential and seals within the prospects, and to obtain critical information on drilling hazards in ooze sediments. Further, the well should provide an optimal seismic tie to the subsurface and to understand the seismic response to the rock properties and fluid fill.

Operations and results

Wildcat well 6305/5-1 was spudded with the semi-submersible installation "Ocean Alliance" on 27 July 1997 and drilled to a total depth of 3053 m in the Nise Formation. The well was drilled water based with KCl brine down to 1544 m and with KCL polymer mud from 1544 m to TD. No problems were experienced in the ooze sediment. Normal pressure was observed through the Brygge Formation. Hole stability problems were experienced in the lower part of the Hordaland Group from 2090 m down to top Tare Formation ("the green shale"). The well proved gas in the "Egga Member" sand, which made it the discovery well for the gigantic Ormen Lange gas discovery. Geochemical analyses of the gas show 95% methane. No potential reservoir sandstone was encountered in the Tare Formation, penetrated at 2327 m. Reservoir sand was encountered in the "Egga Member" of the Tang Formation, penetrated at 2718 m and in the Springar Formation, penetrated at 2780 m. The upper part of the "Egga Member", from 2718 m to 2771 m, consist of a blocky sand. The lower part of the "Egga Member", from 2771 m to 2780 m consists of interbedded sands and mudstone. The upper part of the Springar Formation consists of interbedded sands and mudstones, with a thickening and upwards trend. Six cores were cut through the Tang Formation from 2730 m to 2840.5 m. Five MDT gas samples were taken in the Egga member reservoir sands from 2747 to 2789.1 m. The well was temporarily plugged and abandoned as a gas discovery on 7 October 1997.

TESTING

No DST was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6305/5-1