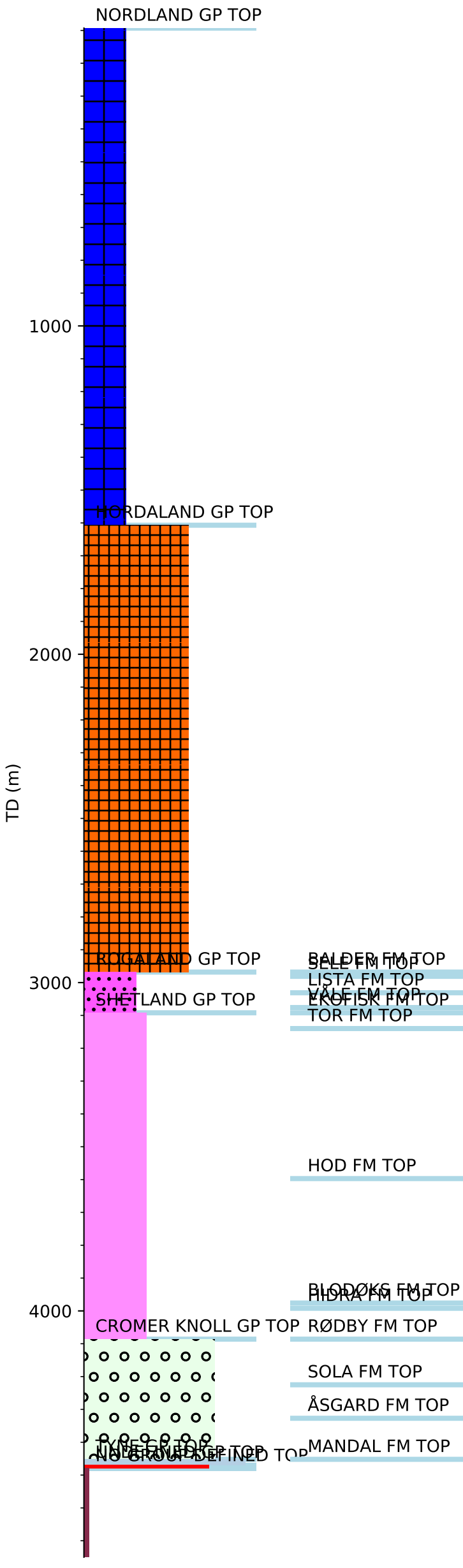
Groups

Formation Tops



Wellbore History

GENERAL

Well 2/7-22 was designed to drill a Late Jurassic prospect as the first commitment well in license 145.The prospect was a structural play defined at an intra-Jurassic level, located to the south-west of the Eldfisk South oil field in the Central Graben. A number of alternative outcomes were modelled to describe the uncertainty in the geological model. The most likely outcome predicted, was for a Jurassic non-marine reservoir section. The large vertical relief of the structure (550 m) also permitted the possibility of an additional lower (Permian) reservoir section. An extensive sidewall-coring program was designed.

OPERATIONS AND RESULTS

Wildcat well 2/7-22 was spudded 17 May 1990 by the semi-submersible installation Ross Isle and completed 15 October 1990 at a depth of 4750 m in interbedded sandstones and mudstones of indeterminate pre-Jurassic age. The well thus fulfilled the geological commitment. The well was drilled with seawater and hi-vis pills down to 1092 m, with ester based Petrofree mud from 1092 m to 2970 m, and with Enviromul oil based mud from 2970 m to TD. No shallow gas was encountered in the well. No conventional cores were cut. Due to hard formation sidewall core recovery was poor, and for recovered sidewall cores the depths are uncertain due to technical problems. The well was a gas discovery having encountered a 14 m pay zone in clean sands of indeterminate age with a hydrocarbon column being smaller than prognosed. A gas/water contact was encountered at 4502 m. The total reservoir thickness is 66.5 m. The Late Jurassic Mandal formation came in 218 m deeper than prognosed. One was tentatively trying to date the rocks below the Jurassic sequence, but these rocks are classified as indeterminate. The reservoir rocks are probably an analogue to the Embla alluvial fan complex. Wireline RFT samples were taken at 4494 and 4547 m. The well was permanently plugged and abandoned as a gas/condensate discovery.

TESTING

One DST test was performed in the interval 4489 to 4496 m. The well flowed 207 Sm3 condensate /day and 347 Sm3 water /day through a 12.7 mm choke.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 2/7-22