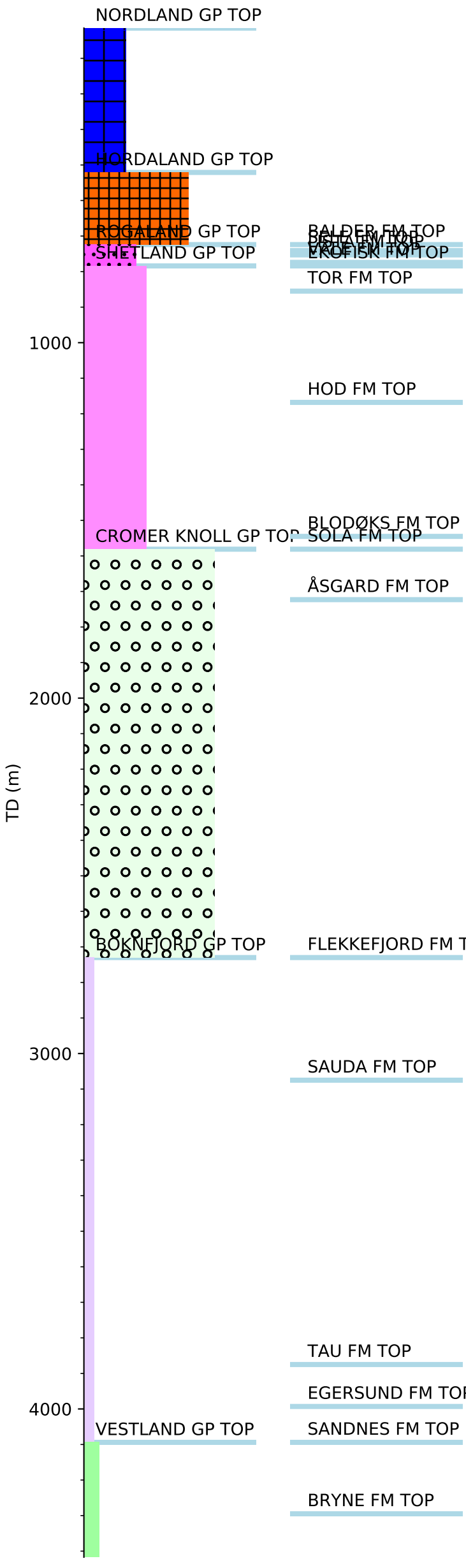

Wellbore History

GENERAL

The main objective for the deviated well 9/2-4 S was to appraise commercial hydrocarbon reserves in the southern part of the Upper Jurassic Gamma structure on the Yme field. Further to prove continuation of the equivalent shallow marine sandstone seen in well 9/2-1, with similar reservoir properties, and finally, to gather data for improved seismic velocity analysis on the southern part of the Gamma structure.

OPERATIONS AND RESULTS

Appraisal well 9/2-4 S was spudded with the semi-submersible installation "DeepSea Bergen" on 25 December 1993 and drilled to a total depth of 4417 m (3313 m TVD) in the Middle Jurassic Bryne Formation. No shallow gas was encountered in the top-hole section. The well was drilled to 4090m MD using water based mud with bentonite and bentonite/CMC EHV down to 647 m. The 17 1/2" section (647 m to 2215 m) was drilled from the top to Early Cretaceous (Top Early Cretaceous at 1590 m) with KCl polymer mud, then converted to Anco 2000 mud by adding 3% glycol. Due to hole stability problems, the well was plugged back to 3755 m and a sidetrack was performed to TD at 4417m using ester based mud. The top Sandnes Formation was penetrated 13.5 m higher than prognosed, and top reservoir sand 17.5 m higher than prognosed. The oil/water contact was not evident in this well. However, the results from the MWD/LWD gave no indication of a different OWC than anticipated in the well 9/2-1 (3210 m TVD MSL). The estimated Net/Gross for the reservoir section is 0.67, which is slightly less than for the 9/2 - 1 well. This is compensated by an increased thickness of high reservoir quality. One core was cut in the interval 4150m - 4168.5 m in the Sandnes Formation. A segregated FMT fluid sample from 4132.6 m gave an oil with density of 0.83 g/cc (at surface condition) and the four pressure measurements from the FMT-log gave an oil gradient of 0.70 g/cc. The well was tied back with 9 5/8" casing and suspended 11 April 1994 as an oil appraisal. The well was then re-classified to development well.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 9/2-4 S