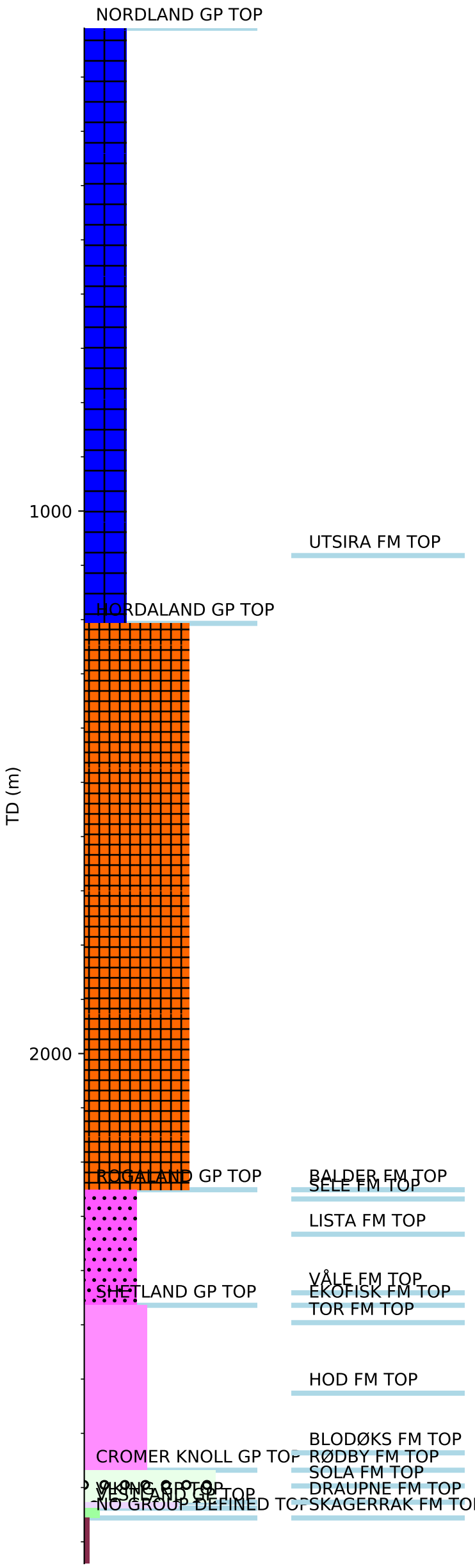
Groups

Formation Tops



Wellbore History

GENERAL

Wildcat well 15/12-8 was drilled ca 3.5 km east of the 15/12-4 well, which made the Varg oil discovery in Jurassic and Triassic sandstones. The main objective of the well was to test the potential for hydrocarbons in sandstones of Oxfordian and Triassic age. Seismic anomalies at 437, 467, 479 and 803 m indicated possibility for shallow gas. Planned TD for the well was 3260 m.

OPERATIONS AND RESULTS

Well 15/12-8 was spudded with the semi-submersible installation Deepsea Bergen on 5 June 1991 and drilled to TD at 3054 m in the Triassic Skagerrak Formation. No significant problems occurred during operations. The well was drilled with seawater / hi-vis pills / CMC down to 615 m, with KCl/polymer mud from 615 m to 2855 m, and with Ancotemp/bentonite mud from 2855 m to TD. No shallow gas was encountered.

Jurassic Vestland Group sandstone was encountered hydrocarbon-bearing at 2838 m. The hydrocarbon column extended 23 m into Triassic sandstone of the Skagerrak Formation. The gas/water contact was estimated to 2877 m, confirmed by FMT pressure gradients and wire line logs. The well was tested, and since no core was cut through the reservoir, the well was sidetracked at 2623 m with TD at 2940 m. The sidetrack was drilled with Ancotemp/bentonite mud. Three conventional cores were cut in the interval 2841 - 2902 m. The sidetrack was formally named 15/12-8 A.

The FMT tool was run in well 15/12-8 and 15/12-8A. One segregated sample was taken at 2863 m in 15/12-8 (gas, condensate and mud filtrate) and another in the water zone at 2888 m in well 15/12-8 A (recovered mud only due to seal failure).

Well 15/12-8 was permanently abandoned on 14 July 1991 as a gas/condensate discovery. The 15/12-8 A sidetrack was permanently abandoned on 29 July as a gas/condensate appraisal well.

TESTING

One DST test was performed in 15/12-8 in the interval 2838 - 2869 m. The well produced gas-condensate with a dew point of 230 bar at the measured reservoir temperature, which was 123 deg C. The rates were 550 000 Sm3 gas and 420 Sm3 condensate /day through a 15.9 mm choke. The condensate/gas ratio was 1308 Sm3/Sm3, the condensate gravity was 61 deg API, and the gas gravity was 0.817 (air = 1).

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 15/12-8 A