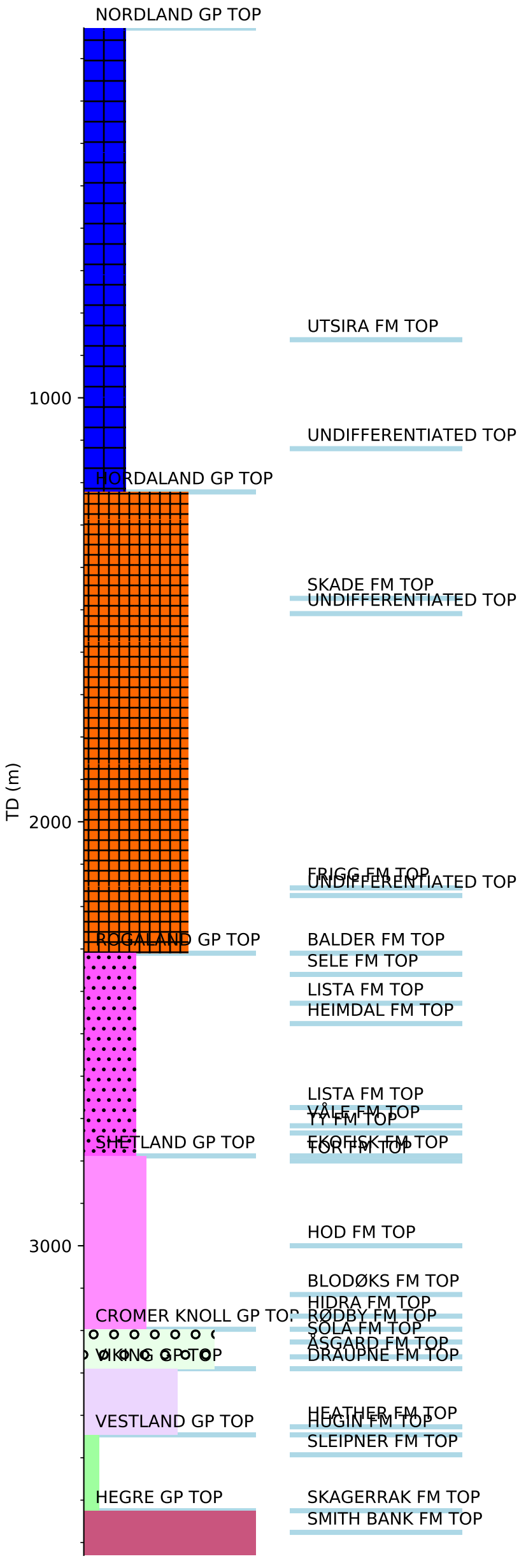

Wellbore History

GENERAL

Well 15/9-8 was drilled on the Delta structure in the southeastern part of the Sleipner West Field in the North Sea. The primary objective was to delineate the hydrocarbon accumulation encountered in the 15/9-4 well on the same structure, and to get further information about the sand distribution in the area. The primary target was Callovian sandstones. Paleocene sandstone was the secondary target.

OPERATIONS AND RESULTS

Appraisal well 15/9-8 was spudded with the semi-submersible installation Nortrym on 5 March 1981 and drilled to TD at 3730 m in the Triassic Smith Bank Formation. Operations proceeded without significant problems. The well was drilled with seawater and hi-vis pills down to 495 m, with gypsum/polymer mud from 495 m to 2845 m, and with a gel/lignosulphonate mud from m 2845 m to TD.

The sandstones in Paleocene were water bearing. Top of the Callovian sandstone, Hugin Formation, was encountered at 3446 m, while top Sleipner Formation was encountered at 3493 m. Bothe formations proved to be gas/condensate bearing with a gas-water contact at 3564 m based on pressure gradients and well logs. No shows were recorded outside of the hydrocarbon bearing Hugin and Sleipner Formation.

A total of 46.5 m core was recovered in four cores from the interval 3448 to 3499 m. Segregated RFT fluid samples were taken at 3460 m (gas, condensate and mud filtrate), 3561.5 m (gas, condensate and mud filtrate), and 3566.5 m (mud filtrate and a smaller quantity of gas).

The well was permanently abandoned on 25 May 1981 as a gas/condensate appraisal well.

TESTING

One Drill Stem Test was performed from the interval 3450 to 3460.2 m in the Hugin Formation. The test produced 255 Sm3 condensate and 820000 Sm3 gas /day through a 91/64" choke. The gas/condensate ratio was 3200 Sm3/Sm3, the condensate gravity was 0.78 g/cm3, and the gas gravity was 0.74 (air = 1). The CO2 content was 6-7%. The DST temperature was 121 °C.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 15/9-8