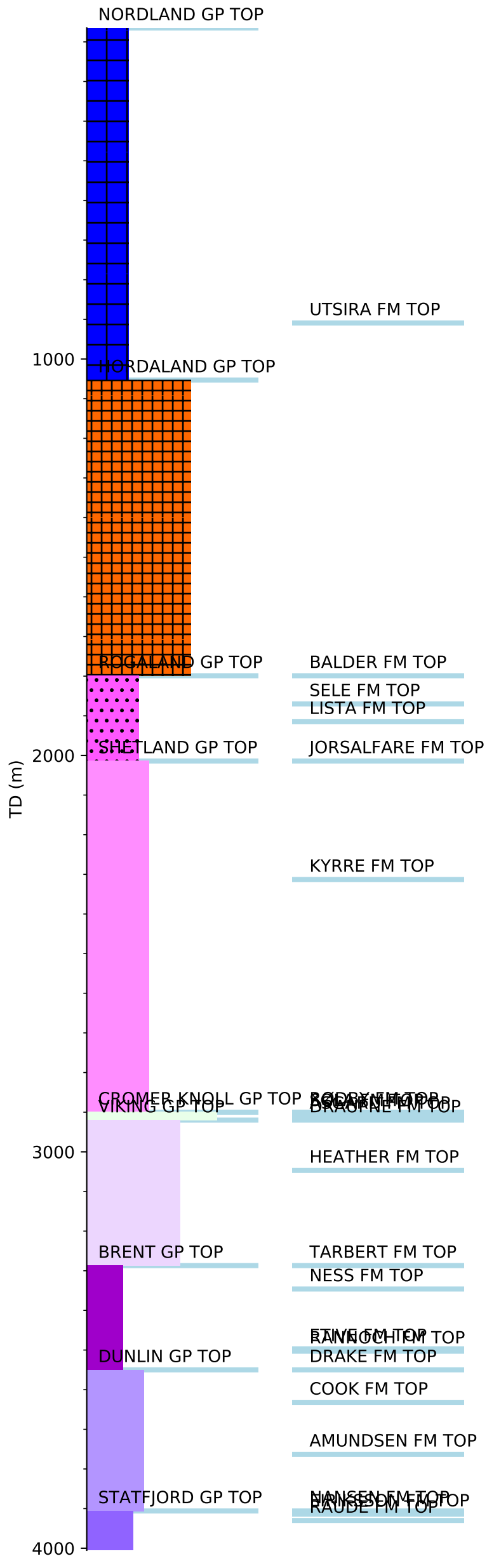

Wellbore History

GENERAL

Well 34/10-21 was the third well drilled on the Gullfaks South structure in the Tampen Spur area in the northern North Sea. The objective was to test for possible hydrocarbon accumulations and for a possible extension of reserves in the Gullfaks South field. Targets included the Brent, Cook and Statfjord Sandstones and possible sand accumulations in the Early Cretaceous.

OPERATIONS AND RESULTS

Appraisal well 34/10-21 was spudded with the semi-submersible installation Dyvi Delta on 26 July 1984 and drilled to TD at 4005 m in Late Triassic sediments of the Raude Formation. The well was drilled with gel/seawater down to 615 m, with gypsum/CMC/lignosulphonate from 615 m 3196 m, and with gel/lignosulphonate from 3196 m to TD.

No sandstones were encountered in the Early Cretaceous. Hydrocarbon bearing Brent sandstone was encountered at 3287 m, with the hydrocarbon/water contact established at 3333 m+/-3 m. No hydrocarbons were identified in the Cook sandstones. The logs indicated hydrocarbons in the Statfjord Group, but drill stem test gave no flow from these sandstones. No shows were described above the Tarbert reservoir. Below the OWC, shows on sandstone were described down to 3359 m.

Six cores were cut; four from 3289 m to 3383 in the Brent Group and two from 3970 m to 3985.5 in the Raude Formation. Core recoveries were from 90 % to 100 %. RFT fluid samples were taken in the Brent Group oil zone at 3298.5 m, 3317.3 m, and 3325.0 m.

The well was permanently abandoned on 22 October 1984 as a gas appraisal well.

TESTING

Two drill stem tests were performed.

DST 1 tested the interval 3905.2 m to 3922.2 m in the Statfjord Group. This test gave no flow.

DST 2 tested the interval 3290.7 - 3312.7 m in the Tarbert Formation. This test produced 130 Sm3 condensate and 837800 Sm3 gas /day through a 14.29 mm choke. The GOR was 6424 SM3/Sm3, the condensate density was 0.80 g/cm3, the gas gravity was 0.65 (air=1). The downhole temperature reading in the test was 119.3 °C.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 34/10-21