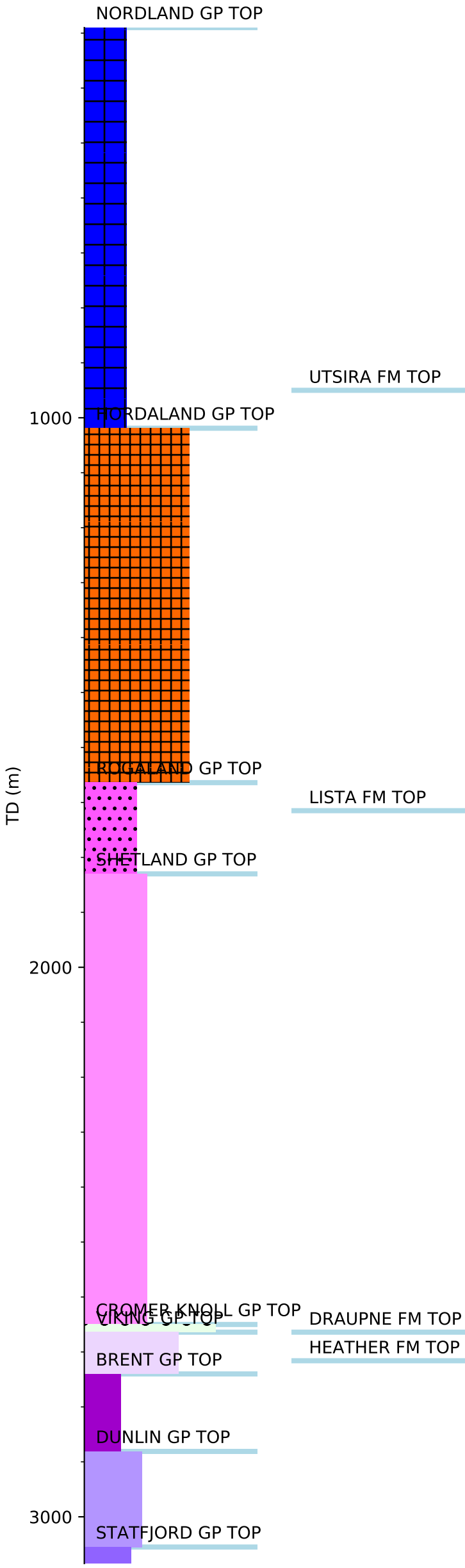
Groups

Formation Tops



Wellbore History

GENERAL

Well 33/9-8, was drilled on a prospect north of the main Statfjord Field in the Tampen Spur area in the northern North Sea. The primary objective was to test sandstones in the Brent Group. Secondary objective was the Statfjord Group

OPERATIONS AND RESULTS

Wildcat well 33/9-8 was spudded with the semi-submersible installation Deepsea Bergen on 11 November 1976 and drilled to TD at 3085 m in the Statfjord Group. The original hole was abandoned at 2974 with stuck pipe. A technical sidetrack was kicked off from 2533 m. Top Brent Group is 6 m deeper in the sidetrack compared to in the original hole.

The sand and sand stringers generally associated with the lower portion of the Paleocene in the area were not developed in 33/9-8. An oil filled Intra-Draupne Formation sandstone was penetrated at 2670 m. This was the first encounter of Late Jurassic sandstone in the 037 License area. The gross thickness of this sandstone is 45.8 m. Net sand was found to be 34.8 m with 27% average porosity, based on log analysis. The whole sand was oil filled down to top Heather Formation at 2716 m. The Brent Group sandstones was encountered at 2740 m with oil down to the OWC at 2741.5 m. Gross thickness of the Brent Group sandstones was 140.3 m. Net sand was found to be 124 m with 22% average porosity. The secondary objective Statfjord Group was water wet without shows.

Three cores were cut in Late Jurassic Viking Group the interval 2670 to 2724.8 m (54.8m). The core recoveries were 2670 to 2671.27 m (7%), 2688.5 to 2706.26 m (97%), and 2706.8 to 2724.5 m (98%) for cores one, two, and three, respectively. The cores were cut in the original hole. Add six meters to the core depths to match with the well logs, which were run in the sidetrack. No fluid samples were taken on wire line

The well was permanently abandoned on 18 February 1977 as an oil discovery.

TESTING

Three drill stem tests were performed.

DST 1 tested the interval 2745.5 to 2748.5 m in the Brent Group. The aim was to locate the oil/water contact. The test produced 1313 m3 water/day through a 3/4" choke. A trace of oil appeared with the water near the end of the test. The bottom hole temperature in the test was 99.2 °C

DST 2 tested the interval 2737.0 to 2741.5 m across the border between the Heather Formation and the Brent Group. The aim was to locate the oil/water contact. This test produced 1003 Sm3 oil and 32900 Sm3 gas /day through a 3/4" choke. The GOR was 33 Sm3/Sm3, the oil gravity was 37.4 °API and the gas gravity was 0.752 (air = 1). The bottom hole temperature in the test was 100 °C.

DST 3 tested the interval 2683.0 to 2686.0 m in Intra Draupne Formation sandstone. The test produced 1997 Sm3 oil and 80730 Sm3 gas /day through a 3/4" choke. The GOR was 40 Sm3/Sm3, the oil gravity was 38.1 °API, and the gas gravity was 0.757 (air = 1). The bottom hole temperature in the test was 95.6 °C.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 33/9-8