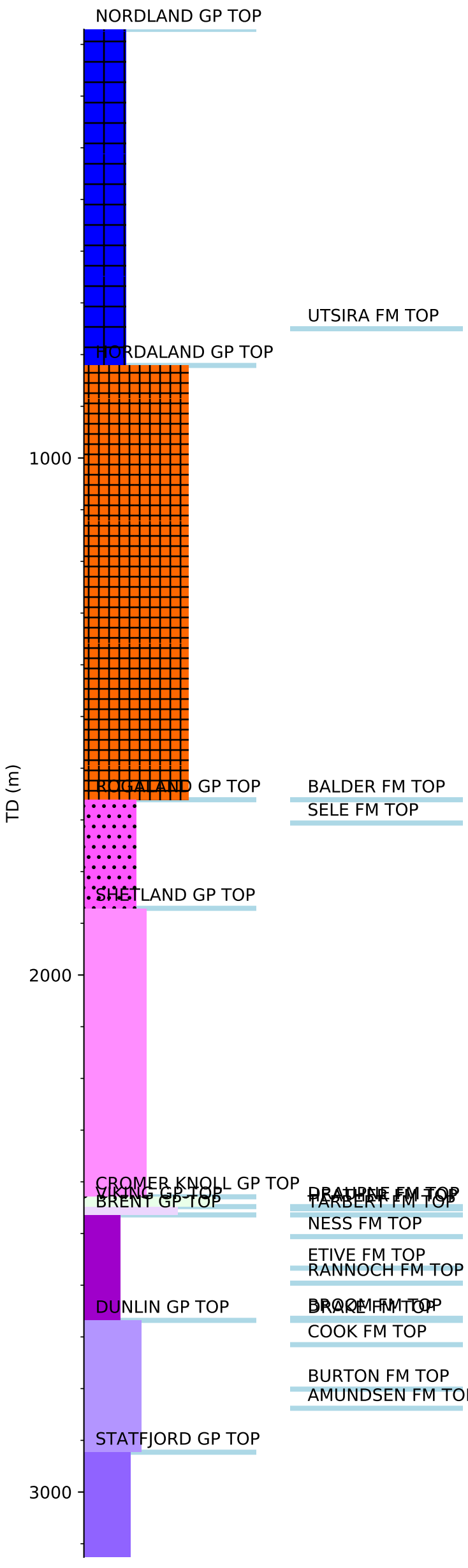

Wellbore History

GENERAL

Well 33/9-1 was drilled on the Statfjord structure. It was the first appraisal well on the structure after well 33/12-1 had discovered oil there in 1973-1974. The primary objective was to test sandstones in the Middle Jurassic Brent Group.

The well is reference well for the Amundsen, Burton, Cook, Drake, Broom, Rannoch, Etive, Tarbert, Heather, and Draupne formations.

OPERATIONS AND RESULTS

Wildcat well 33/9-1 was spudded with the semi-submersible installation Norskald on 2 April 1974 and drilled to TD at 3126 m in Late Triassic sediments of the Statfjord Group.

The target Middle Jurassic Brent Group, Tarbert Formation came in at 2464 m and was oil-bearing down to the OWC at 2584 m in the Etive Formation. The Brent reservoir has 145 m gross pay and 124 m net oil pay. Porosities range from 13.0 to 35.9 percent with the overall average porosity being 25 percent. Average water saturation is 18 percent. Cores taken near top of the reservoir showed porosities up to 37% and permeabilities as high as 4.1 darcy. The Statfjord Group sandstone was penetrated at 2923 m. Statfjord Group sandstone was water wet as expected from the structural position of this well. The sands, however, had very good reservoir qualities with average porosity of 22 percent as calculated from the CPI log.

Two cores were cut in the Tarbert Formation from 2469.2 to 2499.4 m with 18 m recovery (60%) of the total cored interval. No fluid samples were taken on wire line.

The well was permanently abandoned on 4 June 1974 as an oil appraisal.

TESTING

Three drill stem tests were performed in the Brent Group.

DST 1 tested the interval 2614.9 to 2616.4 m in the Rannoch Formation. The test produced up to 2226 m3 water /day through a 5/4" choke.

DST 2 tested the interval 2506.1 to 2507.3 m in the Ness Formation. The test produced 220 Sm3 oil /day through a 1/4" choke. The GOR was 142 Sm3/Sm3, the oil gravity was 37.8 °API, and the gas gravity was 0.661.

DST 3 tested the interval 2464.6 to 2473.8 m in the Tarbert Formation. The test produced 230 Sm3 oil /day through a 1/4" choke. The GOR was 161 Sm3/Sm3, the oil gravity was 38.6 °API, and the gas gravity was 0.691.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 33/9-1