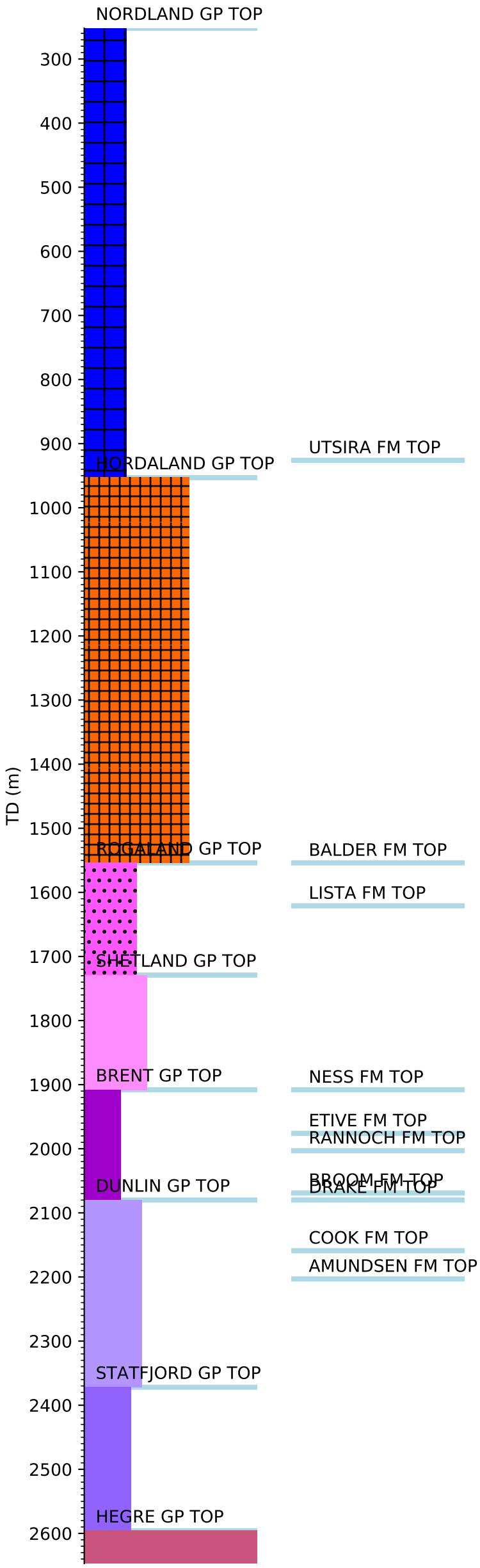
Groups

Formation Tops



Wellbore History

GENERAL

Well 34/10-14 was drilled on a horst block in the north-eastern part of the Gullfaks field. The objectives of the well were to prove the structural position of the middle- and early Jurassic sandstones and to establish the oil-water contact in the Brent Group in this part of the field.

OPERATIONS AND RESULTS

Appraisal well 34/10-14 was spudded with the semi-submersible installation Ross Rig on 24 December 1981 and drilled to TD at 2647 m in the Triassic Hegre Group. Significant downtime (17% of total rig time) was caused by the combined effect of bad weather and the need to pull the BOP three times to detect leaks. The well was drilled with gel/lignosulphonate/seawater mud all through.

Weak shows on limestone and claystone cuttings were recorded intermittently from 1506 m in the Hordaland down to top Shetland Group at 1729 m. Sandstones of the Ness Formation were oil-bearing from 1908 m to the oil-water contact, indicated by pressure measurements and logs to be at 1972 m. This corresponds to the OWC found in the wells 34/10-3, 5 and 8. Shows on cores continued down to 2002 m.

Ten cores were recovered, nine in the interval from 1889 to 2047m KB and one core from 2210 to 2228 KB. RFT fluid sampling was performed at 1917.5 m and 1961.5 m but the fluids recovered were not representative for the reservoir fluid.

The well was permanently abandoned on 19 March 1982 as an oil appraisal well.

TESTING

One drill stem test was performed in the interval 1933.5 m to 1937.5 m in the Ness Formation. The test produced 713 Sm3 oil/day through a 34/64” choke. The GOR was 67 Sm3/Sm3, separator oil gravity was 29.4 °API, and gas gravity was 0.67 (air = 1). The maximum temperature at gauge depth was 75 °C.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 34/10-14