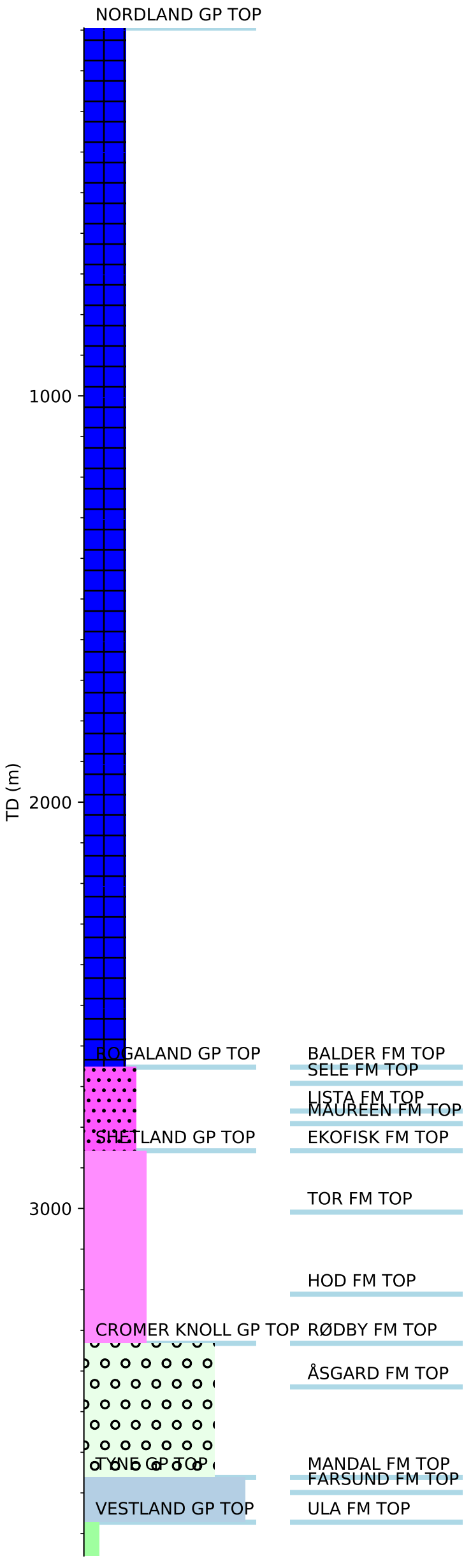
## Groups

## Formation Tops




## Wellbore History

GENERAL

Well 7/12-7 was drilled on the South East flank of the Ula Field. The objective was to identify an optimal location and depth for a planned water-injection well by appraising the oil/water contact in this area.

OPERATIONS AND RESULTS

Appraisal well 7/12-7 was spudded with the semi-submersible installation Vildkat Explorer on 20 June 1989 and drilled to TD at 3855 (3847 m TVD) m in the Late Jurassic Ula Formation. Drilling proceeded without any significant problems. The well was drilled with seawater and bentonite down to 174 m, with seawater/bentonite/spercell/CMC EHV mud from 174 to 1008 m, and with oil based Safemul mud from 1008 m to TD.

Top reservoir was encountered at 3772 m (3765.5 m TVD) and the reservoir was oil bearing. Cores had oil shows down to the base of the last core at 3842 m. A well defined OWC or free water level was not found, though water saturations were seen to rise to the range 60-90% at ca 3819 m. Core porosity and permeability, RFT tests, and geochemical analysis showed a division between producible and residual oil to at 3815 m. From this it was concluded that that the lower contact for producible oil at the Ula East was ca 290 m deeper than at Ula West. Pressure measurements proved communication with the pressure-depleted parts of the Ula Field.

Four cores were cut in the well in the Ula Formation in the interval 3800 to 3842.2 m. Core depths are ca 2 m deeper than loggers' depth. Segregated fluid samples were taken at 3797 m, 3834 m and 3842 m. The 2 3/4 gallon chambers from 3834 and 3842 m and the PVT 1 gallon chamber from 3834 m were drained at surface and contained water with indications of oil. On-shore geochemical analysis of the PVT 1 gallon chamber from 3842.2 m showed that it contained 90/10 water/diesel from the drilling mud. The 2 3/4 gallon chamber from 3797 m contained oil from the reservoir.

The well was suspended on 26 July 1988 as a possible injector. It was classified as an oil appraisal.

TESTING

No drill stem test was performed.

# LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7/12-7