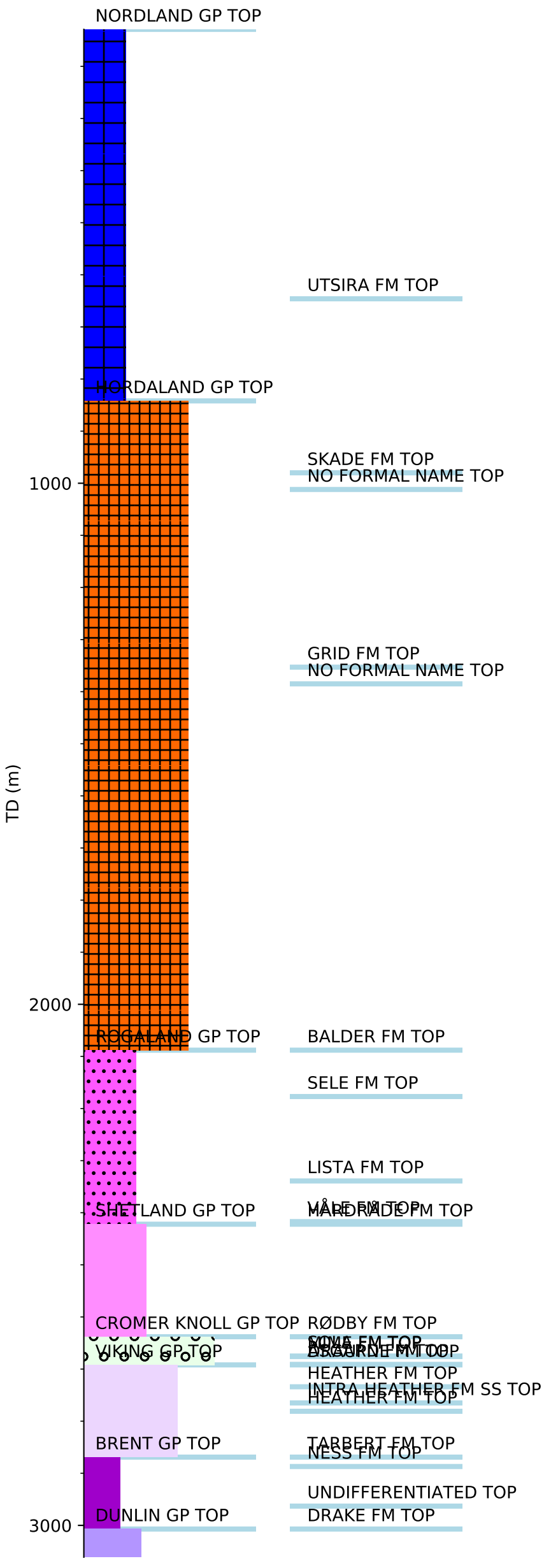

Wellbore History

GENERAL

Well 30/9-12 A was designed as a sidetrack from well 30/9-12 on the Alpha South structure on the southern extension of the Oseberg Field. Well 30/9-12 proved a 10 m column of oil in the Tarbert Formation, but as no oil/water contact was established there remained uncertainty as to the amount of hydrocarbon resources within the southern part of the Alpha South structure. The objectives of well 30/9-12A were to sidetrack approximately 700 m down dip south-eastwards in order to establish the water pressure and oil/water contact in the Tarbert Formation in the area as well as to verify the structural mapping and geological model of the area. No drilling hazards were anticipated.

OPERATIONS AND RESULTS

Appraisal well 30/9-12 A was with kicked off with the semi-submersible rig Vildkat Explorer on 9 May 1991. Kick-off point was at 1033 m, below the 13 3/8" casing shoe in well 30/9-12. The well bore was drilled to a total depth of 3061 m (2927 m TVD RKB) in the Drake Formation of the Dunlin Group. It was drilled with KCl polymer mud from kick-off to TD.

The well encountered an unexpected Heather Formation sandstone development that proved to be hydrocarbon bearing. A total of 2.63 m net pay sand was calculated, with an average porosity of 23.3% and average water saturation of

31.4%. Sandstones of the Brent Group were penetrated below the regional oil/water contact and were found to be totally water bearing. A total of six conventional cores were cut in this well in the interval 2874 m to 2919 m in the Tarbert and Ness Formations. A total of 30 sidewall cores were attempted and 28 were recovered. Drilling went on without any significant problems to TD. Oil was recovered from RFT samples taken at 2776.3 m and 2776.6 m. Geochemical analyses showed the Heather oil in 30/9-12 A correlate very well with Tarbert oils from 30/9-12 and 30/9-10, indicating a common source and identical maturity.

The well was suspended on 4 June 1991 as a minor oil discovery.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 30/9-12 A