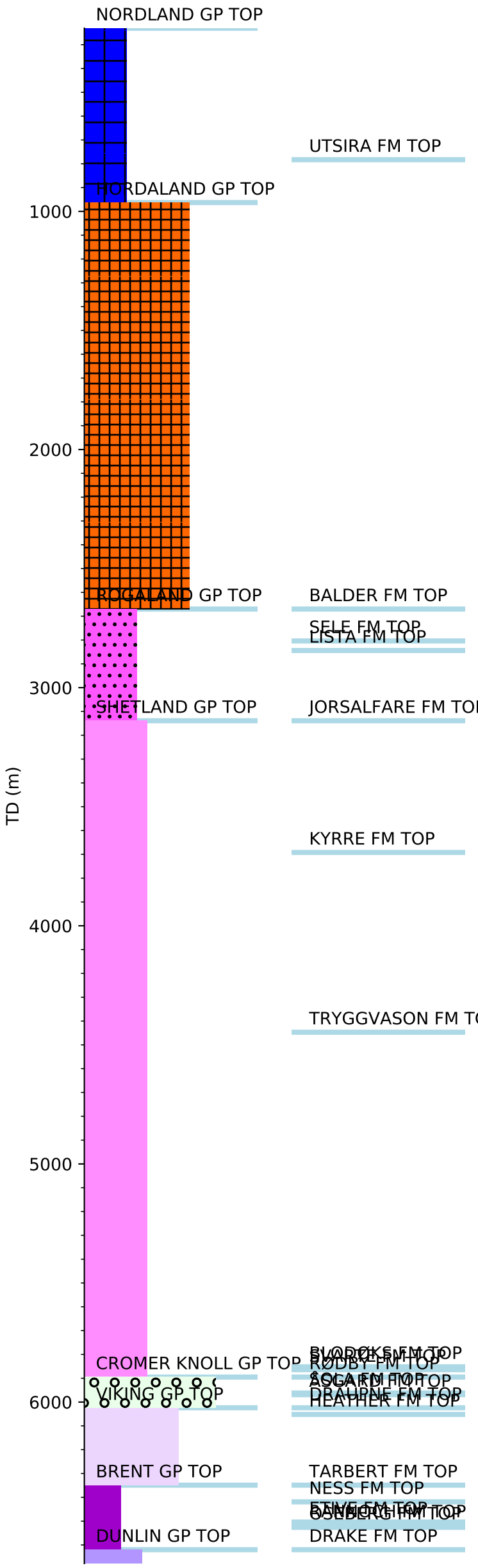
Groups

Formation Tops



Wellbore History

GENERAL

Well 30/3-7 A was drilled on the Veslefrikk Field. The primary objective of the well was to explore the sand potential and possible hydrocarbons in the Late Jurassic sequence west of the Veslefrikk Field (the K-prospect). Well 30/7-3 S, was drilled on the same prospect in 1995, but did not reach the prospect due to an unforeseen fault system. A secondary objective was to drill through the Brent Group of the B-prospect, as a pilot well for a second sidetrack, the 30/3-7B well.

OPERATIONS AND RESULTS

Wildcat well 30/3-7 A was drilled as a sidetrack to well 30/3-7 S, from the fixed surface installation Veslefrikk A. It was first kicked off through the 9 5/8" casing at 3459 - 3462 m in the primary well bore on 13 October 1997. The mill got stuck in the window and the string had to be backed off. A cement plug was set above the fish and a second window was milled from 3336 m to 3340 m. Due to possible high pressure scenarios above the strongly faulted complex penetrated by well bore 30/7-3 S it was decided to run and cement a 7" liner at 5705 m and the bottom part of the well was drilled as a 6" hole. A number of problems mainly related to kick-off, MWD, and logging at high temperatures (in excess of 150 deg C), led to 111 days spent on the well compared to the planned 33.5 days. The well was drilled to final TD at 6678 m in the Early Jurassic Drake Formation. The mud used was Ultidril, a pseudo-oil based mud system where the oil base is synthetic oil (olefines).

The K-prospect was found to consist of well-cemented, fine grained and silty non-reservoir sandstones of Turonian to Coniacian age. There were no recoverable hydrocarbons in this zone. The Base Cretaceous level came in 180 m deeper than prognosed, and the Brent Group came in 168 m deeper than prognosed, whereas the Etive Formation was spot on prognosis. The Tarbert and Ness Formations were thinner, and the base Brent sand (Oseberg Informal Formation) was slightly thinner than prognosed. The logs verified hydrocarbons in the Brent group, but the reservoir quality was generally poor.

The pore pressures are close to the expected values from the 30/6-11 well. The various reservoir zones did not line up along a common gradient, but seemed to be stacked, separate reservoirs. One core was cut in the Cromer Knoll Group from 5909 m to 5922 m. No fluid sample was taken.

The well was plugged back to 5510 m and abandoned on 29 January 1998 as a gas/condensate discovery.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 30/3-7 A