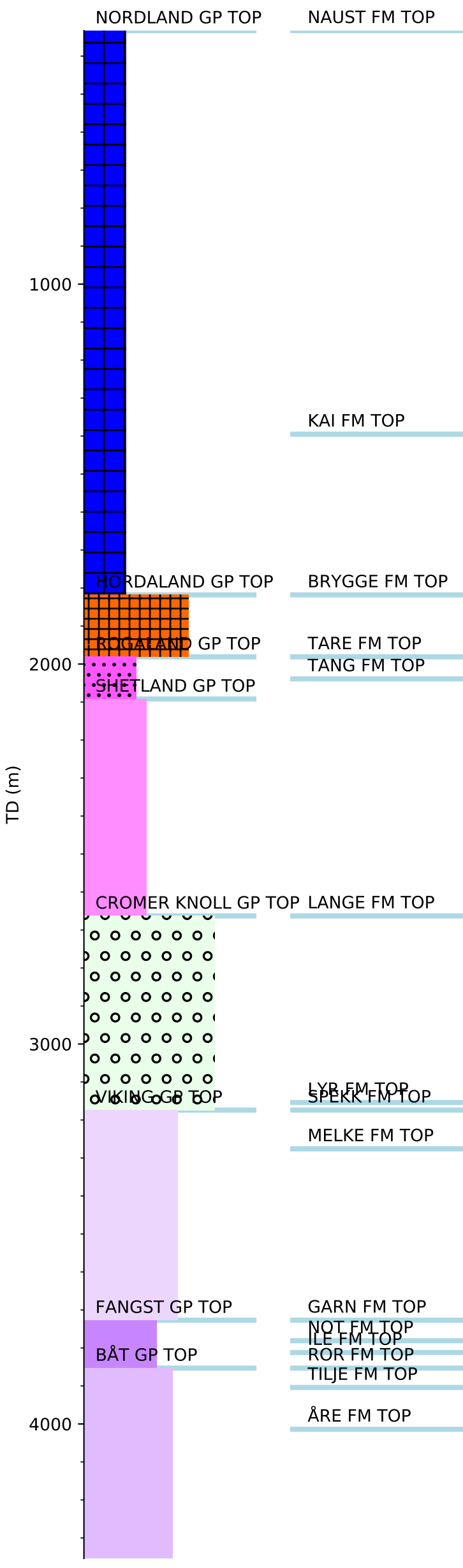

Wellbore History

GENERAL

Well 6507/6-2 was drilled in the north-western corner of the block on a rotated fault block on the Dønna Terrace, immediately northwest of the main fault zone separating the Dønna Terrace from the Nordland Ridge. The main objective of the well 6507/6-2 was to test the hydrocarbon potential in the Fangst Group and in the Tilje Formation. A secondary target was to test the reservoir properties and hydrocarbon potential of a Cretaceous dome shaped structure interpreted to be a potential Lysing Formation Equivalent. The source rock properties in the Spekk and Åre Formations would be tested by the well. The commitment was to drill at least 50 m into rocks of Triassic age; with planned TD at 4200 m. No shallow gas warnings were given for this well.

OPERATIONS AND RESULTS

Wildcat well 6507/6-2 was spudded with the semi-submersible installation West Alpha on 27 April 1991and drilled to TD at 4345 m (4343 m TVD RKB) in Late Triassic sediments of the Åre Formation. Only minor problems occurred while drilling. The well was drilled with spud mud down to 1040 m, with KCl mud from 1040 m to 3413 m, and with Hi-Temp polymer mud from 3413 m to TD.

The well mainly penetrated claystones with minor silt and sandstone intervals down to Top Cromer Knoll Group at 2663 m. In the Cromer Knoll Group the lithology was mainly claystone with thin intervals of sandstone and limestone. The reservoir in the Fangst Group was reached at 3727 m, 336 m deeper than prognosed and proved to be dry. However, oil was found in a thin sand bed in the Lange Formation (Turonian age) at 2754 - 2757 m. This sand was neither cored nor production tested, but oil was recovered by RFT sampling.

Sporadic shows were recorded in thin sandstone stringers at several levels in the Lange Formation (2745 to 2753 m, 2885 m, 2945 - 2955 m, and 2946 m). The well encountered a 102 m thick Spekk Formation sequence at 3174 m. The Spekk Formation had excellent hydrocarbon potential with TOC in the range 6 - 8%, and Hydrogen Index in the range 320 to 475 mg HC/g TOC. The highest HI was in the uppermost part of the formation. Shale samples from the Åre Formation had limited source rock potential with TOC around 2.4 % and HI around 100 mg/g HC.

Two conventional cores were cut in the Garn Formation between 3727 to 3740 m. A total of 180 sidewall cores were attempted and 130 were recovered. After having evaluated the wire line logs, it was decided to take fluid samples at 2754.5 and 2886.5 m in the Lange Formation. A segregated sample was taken at 2754.5 m where 178 litre gas, 890 ml oil, and 100 ml water was recovered. Density of the dead oil (stock tank conditions) was 0.8322 g/cm3. It was not possible to get a sample at 2886.5 m.

The well was permanently abandoned on 16 July 1991 as a well with oil shows.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6507/6-2