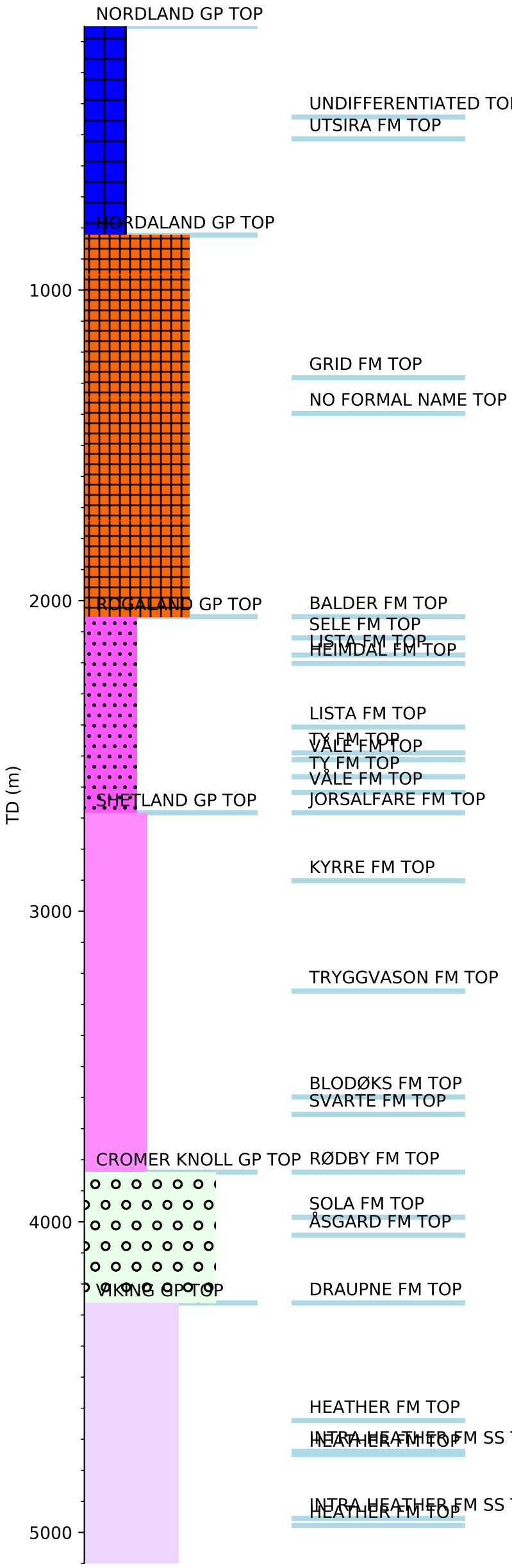
Groups

Formation Tops



Wellbore History

GENERAL

Wildcat well 24/12-2 is located in the Vana Sub-basin in the Southern Viking Graben, about 11 km east of the border to British sector. The well was drilled on structure (Alpha) in the northeastern part of the block. Target was Late Jurassic sandstones.

The well is Reference well for the Sola and Grid Formations

OPERATIONS AND RESULTS

Well 24/12-2 was spudded with the semi-submersible installation Dyvi Delta on 23 June 1981 and drilled to TD at 5100 m in the Late Jurassic Heather Formation. Operations on both 36" and 26" sections went smooth. During drilling of the 17 1/2" section the drill pipe broke off at 2044 m. This was recovered and drilling continued to 2445 m. One stand was left in the hole at this depth and fishing was unsuccessful. Both fish and open hole were cemented up to 2160 and the well was sidetracked from 2220 m. After setting the 13 3/8" at 2886 m casing the Kelly bushing elevation was changed from 32 m to 30 m. The 8 1/2" hole was drilled to 4306 m when a 21-day strike occurred. The well was drilled with seawater and gel down to 1005 m, with gypsum / lime / polymer from 1005 m to 2866 m, and with a Spersene / XP-20 / Resinex mud from 2886 m to TD.

Tertiary sandstones were encountered in the Grid Formation (1282 m to 1397 m), the Heimdal Formation (2202 m to 2407 m), and the Ty Formation (2567 m to 2617 m). The main target Late Jurassic sandstones were found (Intra Heather Sandstone Formation) in the intervals 4739 m to 4749 m and 4955 m to 4978 m. These sands had poor reservoir properties. Oil shows were recorded in the Heimdal Formation. Ca 380 m of Draupne Formation was penetrated by this well. The dark shales in this formation had TOC typically in the range 4 % to 7 %, but with relatively low Hydrogen Index (50 to 110 mg/g HC). The Kerogen in the shales appeared to be mostly type III with some Type II towards the top. Measured vitrinite reflectance varies somewhat between different laboratories, but maturity is advanced with %Ro in the range 0.9 (Geolab Nor 1990) to 1.0 - 1.3 (IKU 1982). Similar TOC levels as in Draupne were found all through the Heather shales down to TD, but the hydrogen index in Heather is even lower and the maturity higher. One core was taken in Intra Heather Formation Sandstone from 4960 m to 4978 m. An attempt was made to take two RFT samples, but this was not successful due to tight formation.

The well was permanently abandoned on 23 June 1981 as a well with shows.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 24/12-2