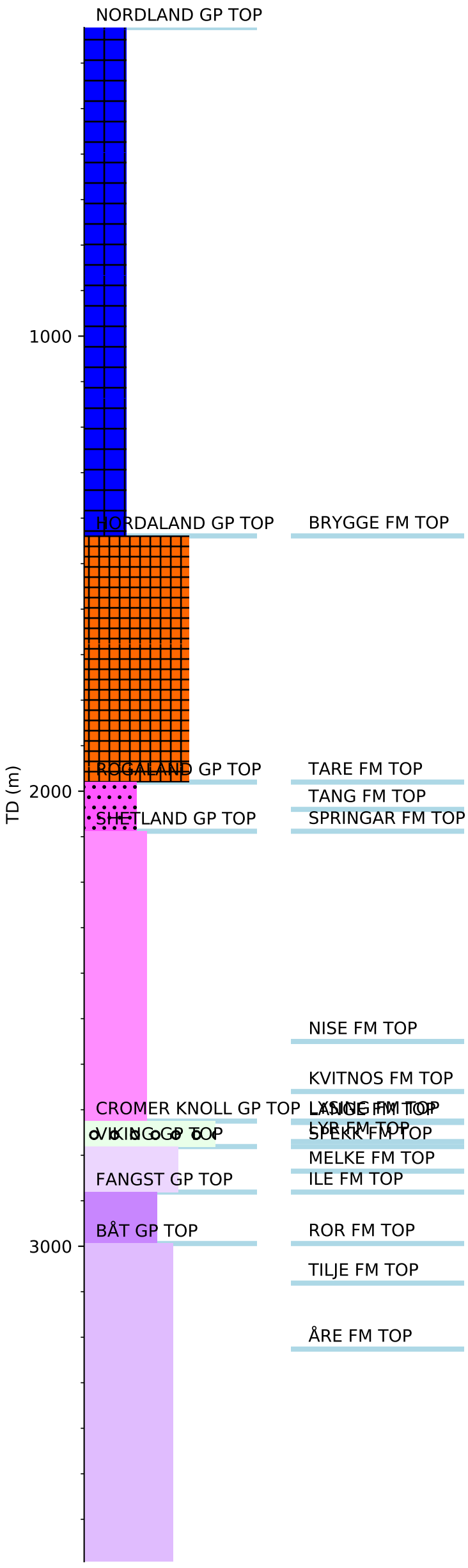
Groups

Formation Tops



Wellbore History

GENERAL

Exploration well 6507/10-1 was the sixth well drilled on the Mid Norway continental shelf area. It is located in between later discoveries such as SmØrbukk, Heidrun, and Midgard. The main targets of the well were sandstones of middle to Late Jurassic age. Secondary targets were sandstones of Early Tertiary, Early Jurassic and Triassic age.

The well is Reference Well for the Ror Formation.

OPERATIONS AND RESULTS

Wildcat well 6507/10-1 was spudded with the semi-submersible installation Sedco 707 on 10 July 1982 and drilled to TD at 3693 m in the Åre Formation. Tight hole was experienced at the bottom of the 13 3/8" section. While drilling the 12 1/4" section the drill string stuck. After several attempts to free the string, the well was sidetracked. The sidetrack was drilled to 2007 m where the string again got stuck. The well was then sidetracked again to 2220 m at which point the string got stuck again. This time the string was jarred free and the 12 1/4" hole was finally drilled to 2780 m. Problems with the BOP and wellhead delayed operations in the 8 1/2" section. The well was drilled with spud mud down to 440 m, with a sea water/clay built native mud from 440 m to 913 m, and with CMC/gypsum mud from 1971 m to 2149 m. From 2149 m to 2780 m the mud was gradually broken over to a lignosulphonate (Spersene) mud, and from 2780 m to TD a Spersene/XP 20 mud was used.

Sandstones were found in the Middle and Early Jurassic. The Early Tertiary sandstones were not present. The Triassic sandstone horizon was not penetrated. An 11% methane gas peak was recorded from a Miocene sandstone at 590 m but no fluorescence was noted. Sandstone in the interval 1790-1805 m produced a slow crush cut fluorescence as did the Late Jurassic mudstone between 2779 m and 2828 m in the Spekk Formation. These were the only hydrocarbon indications recorded in the well. Logs and RFT pressure gradients proved all potential reservoir sections in the well to be 100% water wet. Organic geochemical analysis of the Jurassic sandstones confirmed the general lack of migrated hydrocarbons and found the well to be thermally immature down to about ca 3000 m.

Two cores were taken at 2880.5 m to 2889.5 m and 3073.6 m to 3083.2 m in the Ile and Tilje Formations, respectively.

No fluid samples were taken.

The well was permanently abandoned on 31 October 1982 as a dry well.

TESTING

No drill stem test was performed in the well.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6507/10-1