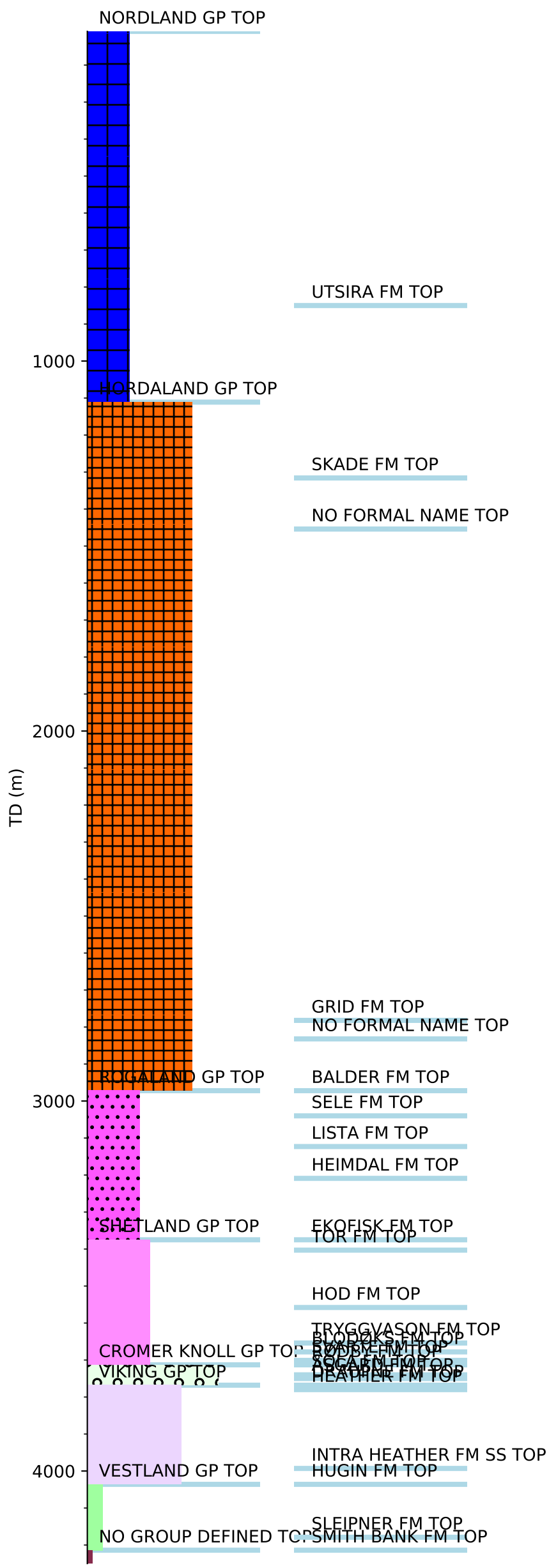

Wellbore History

GENERAL

Well 15/9-19 B was drilled back-to-back with 15/9-19 A. The -19 A well proved an 80 m oil column in the Hugin Formation, and no OWC was found. Also, top Hugin Formation was found 62.5 m deeper than prognosed in the former well. The overall well objective of 15/9-19 B was to obtain a better definition of the resource estimate of the Theta Vest structure by identifying the oil-water contact, establish the pore pressure east of the -19 A well, and to improve the seismic tie.

OPERATIONS AND RESULTS

Sidetrack well 15/9-19 B was kicked off from 2200 m in well bore 15/9-19 A on 9 November 1997, using the semi-submersible installation Byford Dolphin. Well 15/9-19 A in turn, was drilled as a sidetrack of well 15/9-19 SR drilled in 1993. The well 15/9-19 B was drilled as an 8 1/2" hole from the kick-off point to 3272 m. Due to stuck pipe the string was severed and the well plugged back. A technical sidetrack (15/9-19 BT2), was then made from 2911 m and drilled as 8 1/2" hole to 3220 m. A 7" liner was set at 3198 m, and 6" hole drilled to well TD at 4250 m / 3360.5 m TVD RKB, approximately 30 m TVD into the Triassic Smith Bank Formation. The originally planned open hole electric logging program was performed in the 6" hole section due to setting of 7" liner. All planned logs were run, and data obtained had generally good quality. Due to casing-ringing data from the MAC log in 7" liner is of poorer quality. The well was drilled with the oil based Ultidril mud system from kick-off to TD.

The top of the Vestland Group, Hugin Formation was penetrated at 4036 m (3174 m TVD RKB) approximately 100 m TVD deeper than prognosed and 47.5 m deeper than the oil down-to contact in the -19 A well. The mismatch with the prognosis was due to wrong pick on the seismic. Both the Hugin and the Sleipner Formations were present with a total thickness of 156 m, of which the Hugin Formation was 126 m (TVD). The well is classified as dry. However, in the Hugin Formation weak to fair shows from 4036 m and over the cored intervals were reported.

Four conventional cores were cut in the interval 4037 m to 4109 m in the Hugin Formation. The FMT measurements confirmed a water gradient (0.1069 bar/m) in the Hugin sandstones, with a pressure of approximately 1.09 g/cc equivalent mud weight. No formation fluid samples were collected in the well.

The well was permanently abandoned on 2 February 1998 as a dry well with shows.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 15/9-19 B