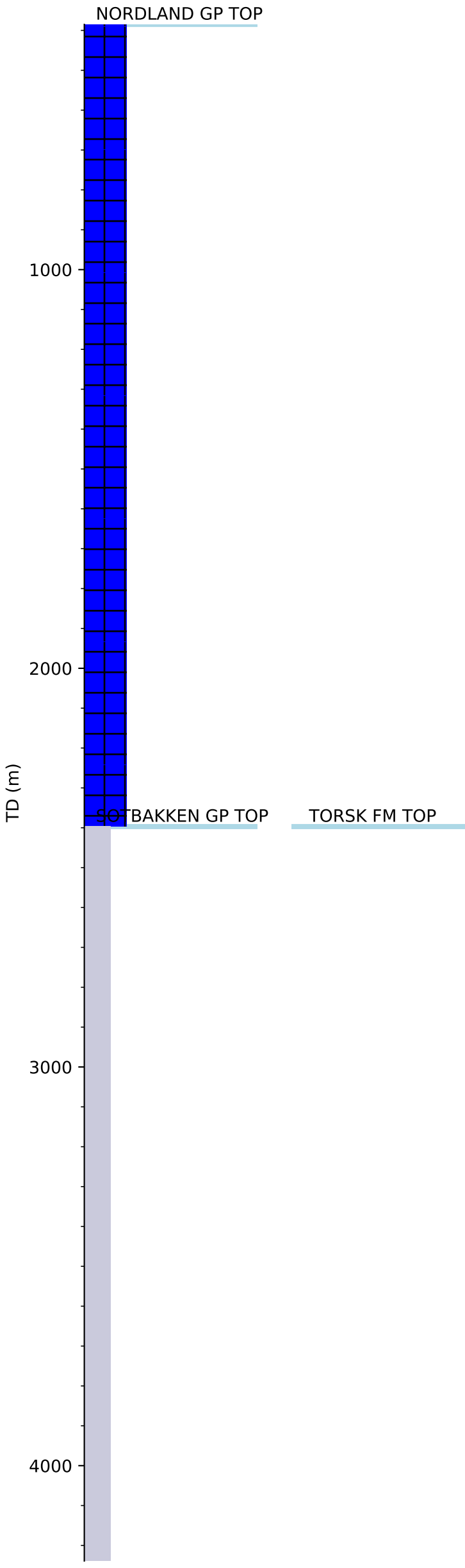
Groups

Formation Tops



Wellbore History

GENERAL

The objective for well 7216/11-1 S was to test the hydrocarbon potential of the A-structure in PL221. Three target horizons were defined in the Palaeogene Lower Torsk Formation (Sotbakken Group). The primary objective was to test the hydrocarbon potential of the A1 prospect, defined as a closure along the flanks of the "A1" horst block at Early Eocene & Late Palaeocene level. The secondary and tertiary objectives were to test the reservoir and hydrocarbon potential of the "A2" and "A3" prospects in the horst block further to the west. The well was originally planned as a straight vertical well east of the horst. The volumes that would be left up dip were, however, considerable. Early in the planning stage the licence therefore decided to drill the well as a deviated borehole.

OPERATIONS AND RESULTS

Exploration well 7216/11-1 S was spudded with the semi-submersible installation "Transocean Arctic" on 24 July 2000 and drilled deviated to TD at 4239 m (3733.2 m TVD) in Late Palaeocene sediments of the Torsk Formation. The well was drilled water based with bentonite mud down to 1004 m, and with the "GLYDRIL" mud system from 1004 m to TD. A total of 30 m gross reservoir sequence of excellent quality turbidite sandstone was penetrated in the Late Palaeocene A1 Structure. The reservoirs of the prognosed A2 and A3 prospects were not developed. No HC was encountered in the A1 Formations. No shows were observed while drilling the well. No shows were recorded at well site. After core no 1 was brought onshore and slabbed a bright blue yellow fluorescence was observed in the interval 2991 - 2991.5 m. Neither oil stain nor petroleum odour was observed on the cores. The cuttings gas log indicated an increase in wetness through the claystones above the A1 reservoir, with a maximum wetness in the top of A1. The MWD logs indicated, however, that this sequence was water bearing. Two conventional cores were cut in the Torsk Formation: Core 1 recovered claystone / sandstone from 2988.0 m - 2996.4 m, while core 2 recovered claystone / shale from 4230.0 m & 4238.0 m. One MDT (Modular formation Dynamics Tester) was carried out, but fluid samples were not taken. Due to an obstruction in hole at 2806 m MD, neither logging on wire, TLC or CST was performed in the 8 1/2" section. Thus, only MWD / LWD logs exist from this section. No fluid contacts or fluid gradients was identified from the log and pressure data. A thin gas bearing sand was however observed from density/neutron log at 2012 m. The well was permanently abandoned as a dry well on 14 September 2000.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7216/11-1 S