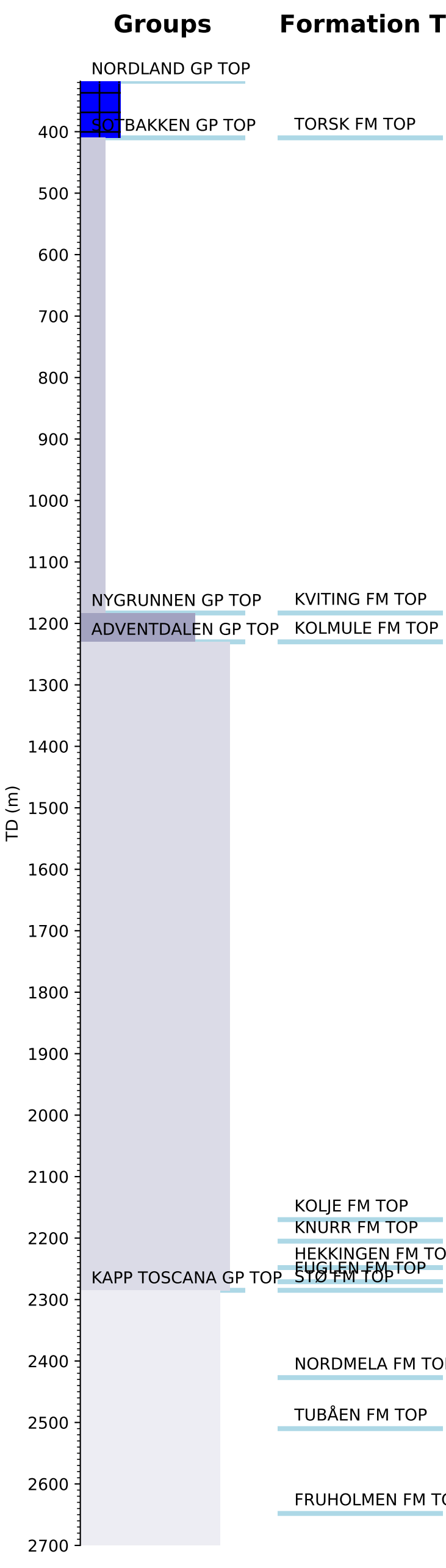

Wellbore History

GENERAL

Wildcat well 7120/5-1 was drilled west of the Snøhvit Field on a separate structure, the Alpha structure in the Hammerfest Basin. The main objective of the well was to test possible hydrocarbon accumulations in the Alpha structure of Middle to Lower Jurassic age. A secondary objective was to drill into rocks of upper Triassic age at a prognosed depth of 3047 m.

OPERATIONS AND RESULTS

Well 7120/5-1 was spudded by Smedvigs semi-submersible rig West Vanguard 17 April 1985, and completed 6 June 1985. The well was drilled with spud mud down to 885 m and with gypsum/polymer mud from 885 m to TD. Seventy-four meter below the 20" casing shoe, after the well had penetrated a fault at 954 m, high background gas with heavy components was encountered. The high background gas persisted throughout this section down to the 13 3/8" casing point at 1975 m. Drilling went on without any serious problems.

The lithology in the Tertiary and Cretaceous comprises clay with scattered Lime-, Dolomite- and Siltstone layers. The Jurassic Stø Formation was encountered at 2285 m represented by clayey sands, while the clean part of that formation came in at 2341 m. Nordmela Formation was found at 2427 m, and top of Triassic rocks, Fruholmen Formation, came in at 2648 m. Both Stø- and Nordmela Formations were water bearing, but with good oil shows. Geochemical analyses of extracts from this interval showed a waxy oil. In a sandy zone between 2405 m to 2420 m high resistivity values were encountered, but RFT tests and pressure measurements gave negative results. Good source potentials were found in mudstones below ca 1900 m. Shales from 1900 m to 2230 m had TOC in the range 1 % - 3.5 %. A 20 m thick, very organic rich shale with 6 - 19 % TOC was encountered from 2251 m to 2271 m in the Hekkingen Formation. Below this level to TD, frequent claystone interbeds had TOC in the range 0.5 % - 5.5 % in cuttings (up to 13.42 % in a swc from 2351.2 m). The highest hydrogen index was seen in the rich Hekkingen shale (200 - 250 mg/g), which correspond to potential for gas with some oil. Six cores were cut in the interval 2286- 2425.5 m, all in the Stø Formation. Close to all of the Stø Formation was cored. A segregated RFT sample was taken at 2346 m. It recovered water with some gas.

The well was permanently abandoned on 6 June 1985 as dry well with shows.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7120/5-1