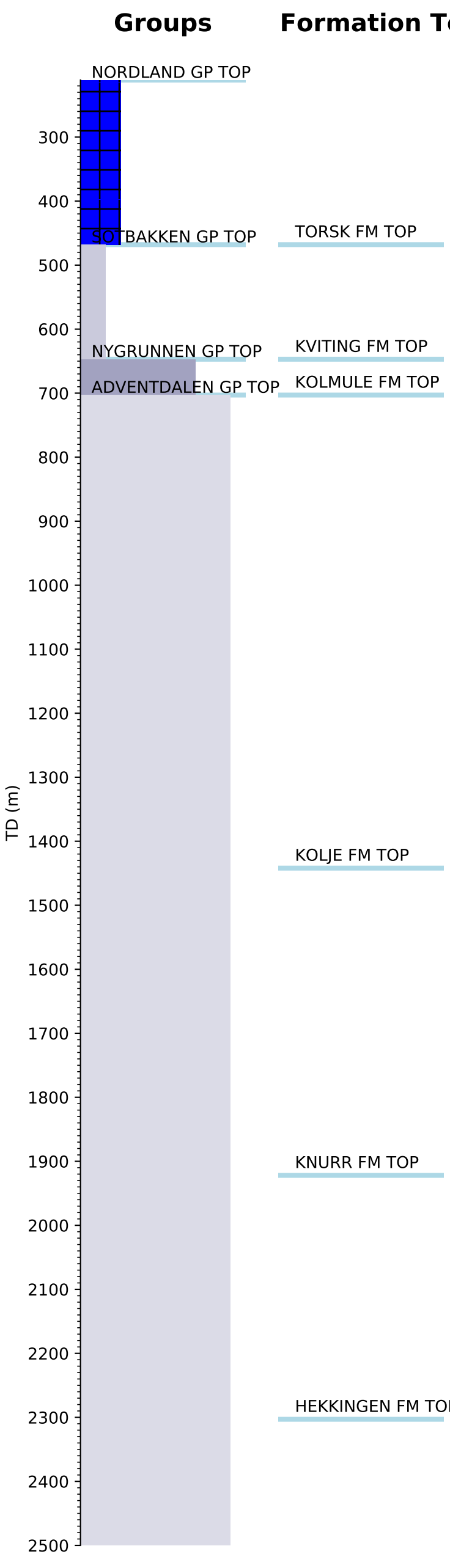

Wellbore History

GENERAL

Block 7120/10 is situated on the southwest margin of the Hammerfest Basin with the Tromsø Basin to the west, and the Troms-Finnmark Platform to the south. Well 7120/10-2 was designed to drill Valanginian submarine fan sandstones, where the hydrocarbon trap is formed by up dip sand pinch out to the south and west combined with structural dip to the northeast. The reservoir was prognosed to be penetrated at 2080 m sub sea. The source kitchen for the prospect was expected to be the Hekkingen Formation of Late Jurassic, which is good to rich source rocks and contains oil prone kerogen. Surface to 214 m subsea could contain boulders and thus cause drilling problems.

OPERATIONS AND RESULTS

Wildcat well 7120/10-2 was spudded with the semi-submersible installation Byford Dolphin on 20 July 1990 and drilled to TD at 2500 m in the Late Jurassic Hekkingen Formation. Three incidents delayed the drilling for a total of 13.5 days: 1) A boulder bed in the 36" section made it necessary to make a trip to change the BHA. The old hole could not be located on this wiper trip so the string was pulled to re-spud; 2) A wellhead connector leak needed to be diagnosed and repaired; 3) Logs hung up at ledges formed when the shale/ claystone was washed out while resistant limestone were not. As a consequence of the latter no wire line logs were obtained over the interval 2106 m to 1935 m. This interval comprises predominantly shale but does include two sandstone beds (2052 m to 2059 m and 2036 m to 2038 m). The well was drilled with seawater down to 523 m and with lignosulphonate/seawater/gel from 523 m to TD.

The well penetrated the primary objective, Valanginian sandstones, at 2125 m within the Knurr Formation. These reservoir quality rocks comprised of sandstones with minor interbedded siltstones and shales for a thickness of 178 m down to the contact with the Late Jurassic Hekkingen Shale at 2303 m. These reservoir sands all proved water wet. The well penetrated 197 m of Late Jurassic source rock of variable richness. No truly "hot" shale was penetrated, although the Hekkingen Formation did contain organic rich material and showed a significant gas increase with moderately bright cut and crush cut fluorescence throughout. One core was cut in the interval from 2127 to 2136 m. The core was cut close to the top of the sand-prone section. No fluid sample was taken.

The well was permanently abandoned as a dry hole on 5 September 1990.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7120/10-2