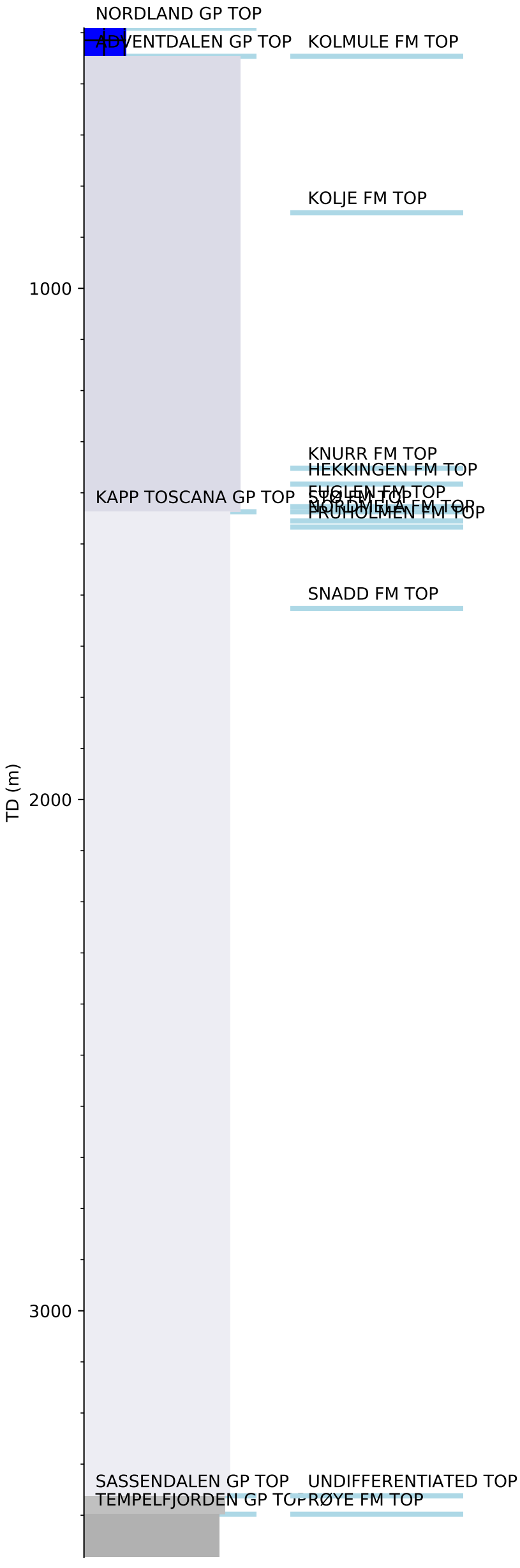
Groups

Formation Tops



Wellbore History

GENERAL

Well 7321/8-1 is located in the Fingerdjupet Sub-basin in the Bjørnøya East area. The main target of the well was to test the reservoir properties and hydrocarbon potential of Middle to Early Jurassic sandstones. It was drilled in a position that would leave the minimum of reserves untested up-dip. Secondary targets were seen in Late Triassic sandstones and in the Permian sequence. The wildcat well should further establish good seismic tie and gather maximum amount of geological information on source, seal and reservoir intervals.

OPERATIONS AND RESULTS

Wildcat well 7321/8-1 was spudded with the semi-submersible installation Polar Pioneer 23 June 1987 and drilled to TD at 3482 m in Late Permian silicified shale of the Røye Formation. Drilling operations went without significant problems. The well was drilled with seawater and hi-vis pills down to 818 m, with KCl / polymer mud from 818 m to 2584 m, and with polymer mud from 2584 m to TD. The hole was drilled to 818 m without riser.

The primary target reservoir interval (expected Stø-Tubåen Formations) was penetrated at 1437 m, 201 m higher than expected. The best interval here was from 1437 m to 1567 m, which consisted of a fine-medium grained sandstone with interbedded shales. The sequence had 92 m net sand with 17.8 % average porosity. The interval was found water bearing with residual hydrocarbon saturation. The Base Late Triassic sandstone interval was found water bearing. The prognosed Permian reservoir sequences were found at 3398 m, 875 m higher than expected. It was poorly developed and merely consisted of silicified and pyritised shales and claystones with some minor weakly calcite cemented, low porosity sandstones. No hydrocarbon indications were seen in this section. Shows were recorded on cuttings and cores in several sequences between 890 m and 1557 m. Shows were also recorded on cuttings from 2618 m to 2628 m. Seven cores were cut in this well. Four of these were cut in the interval 1443.5 m to 1544.7 m in the primary target interval. Two were cut in the intervals 2670.8 m to 2678.8 m and 2839 m to 2847 m in the Triassic and one from 3430 m to 3431.4 m in the Late Permian. RFT fluid samples were taken at 2598.8 m (150 ml mud filtrate only) and at 1476.4 m (Formation water and gas).

The well was permanently abandoned on 3 September 1987 as a dry hole with residual hydrocarbon shows in Jurassic and Late Triassic sandstones.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7321/8-1