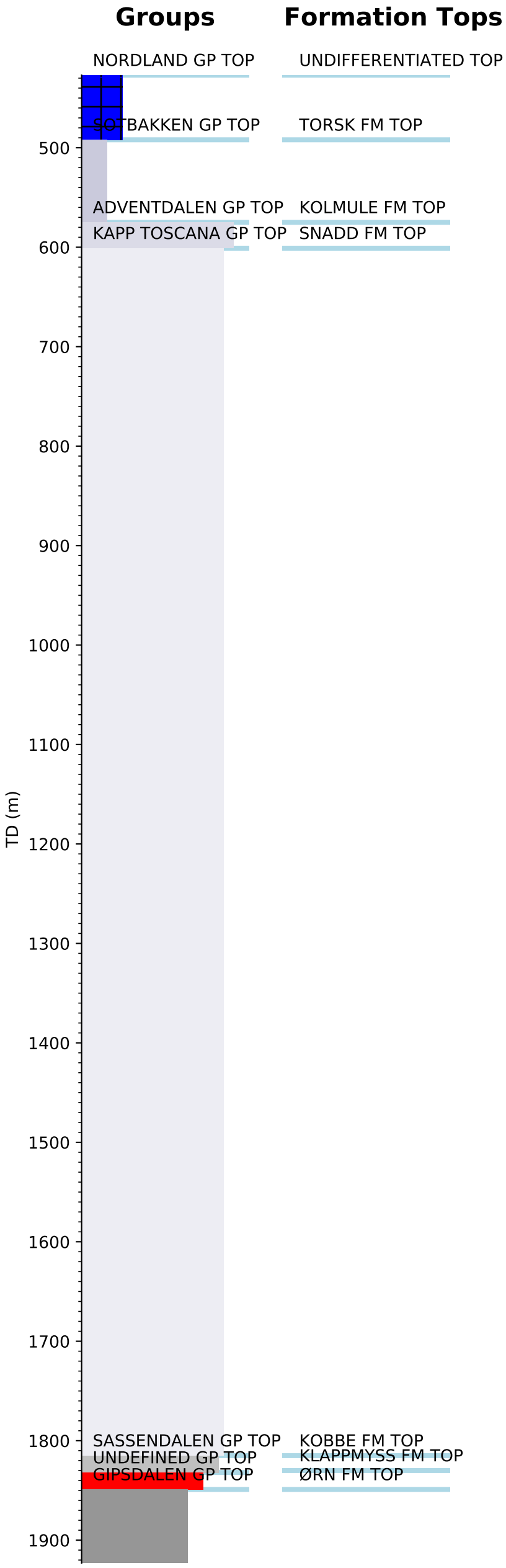

Wellbore History

GENERAL

Well 7220/11-3 was drilled to appraise the Alta discovery, about four kilometres south of discovery well 7220/11-1 and approximately 3 kilometres northeast of appraisal wells 7220/11-2 and 7220/11-2 A. The Alta discovery lie on the southern part of the Loppa High in the Barents Sea and comprises a structural trap with closures at the Permian-Triassic and Basement levels. The primary appraisal objectives were to confirm the presence of hydrocarbon columns and fluid contacts in a crestal position of the structure, and to test the reservoir properties of the Permian carbonates.

OPERATIONS AND RESULTS

Appraisal well 7220/11-3 was spudded with the semi-submersible installation Island Innovator on 14 June 2015. During coring in karstified chalk and limestone at 1954 m, the core bit ran into a cavern of unknown size. The string suddenly dropped 2 meters with no WOB. Total fluid losses occurred at a loss rate of 60 m3/hr. The well was shut in with seawater in the annulus and a full well control incident occurred. The drill string was shot-off, leaving the core barrel in the hole. The main bore was drilled with seawater and hi-vis pills down to 598 m and with Aqua-Drill mud from 598 m to 1956 m, which became TD. The main wellbore was plugged back to the 13 3/8" casing shoe and a technical sidetrack, 7220/11-3 T2, was kicked off from 1087 m to secure missing data. The sidetrack was drilled to a total depth of 1922.5 m (1920 m TVD) in the Permian Ørn Formation. The technical sidetrack well 7220/11-3 T2 was drilled with Aqua-Drill mud from kick-off to TD.

Well 7220/11-3 encountered a 75-metre thick gas column and the upper part of an oil column in carbonates in the Gipsdalen Group of good to very good reservoir quality. The reservoir conglomerate was encountered at 1834.5 m (1832.0 m TVD) and the underlying carbonates at 1856 m (1853.5 m TVD). Due to concerns of further severe losses, the technical sidetrack was not drilled to a sufficient depth to penetrate the expected FWL, however, wireline pressures, fluid gradients and samples were acquired in the gas and oil zones suggesting a GOC at 1912.5 m (1910 m TVD). Fluid gradients and pressures were comparable with those acquired in the discovery well. Residual oil shows were observed in the main well bore at 645 to 650 m, 860 to 936 m, 1093 to 1202 m, and 1295 to 1650 m. In the sidetrack similar shows were observed, in addition to shows on cores from the Kobbe and Klappmyss formations (1820 - 1824 m and 1832 to 1834.5 m respectively), and in the reservoir Triassic conglomerates and Permian Carbonates.

A total of 11 cores were attempted of which 10 were recovered. Cores 1 to 10 were cut in succession from 1814 to 1945.9 m in the main bore with 98% total recovery. The last core was lost in hole because of severe mud losses. Wire line logs were run in the sidetrack where MDT fluid samples were taken at 1919.7 m (oil), 1912 m (gas), and at 1841.9 m (gas).

The well was plugged back to 1016 m on 2 September 2015 as an oil and gas appraisal well. A geological sidetrack well 7220/11-3 A followed for further drilling and testing.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7220/11-3