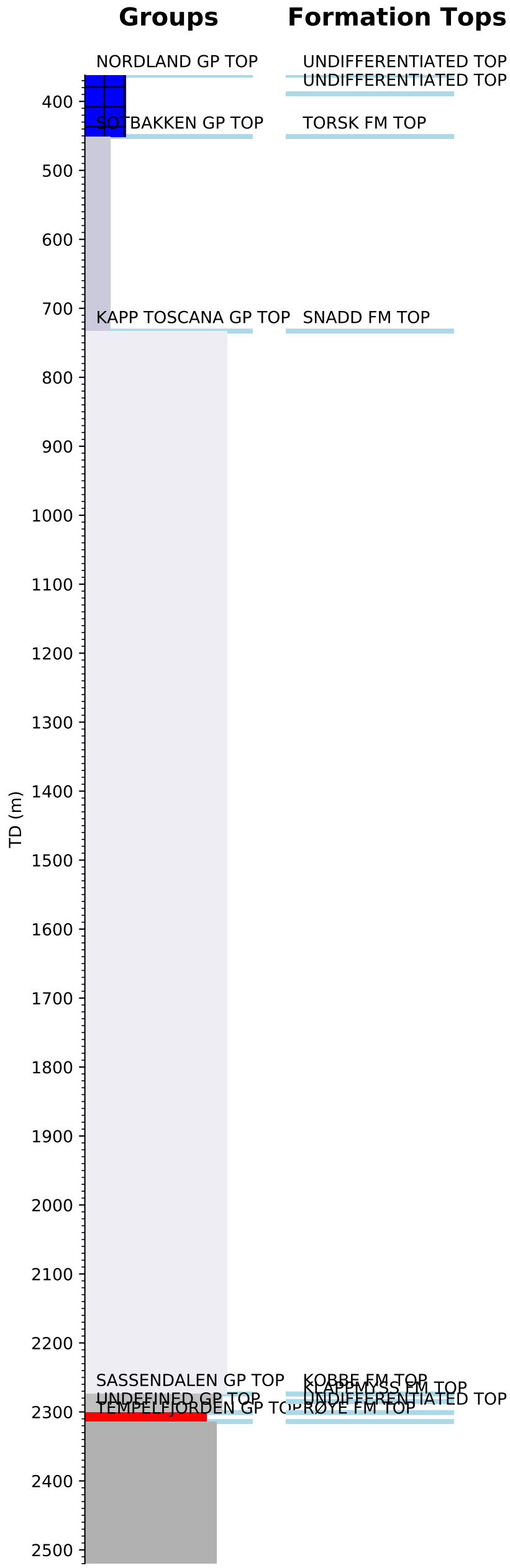

Wellbore History

GENERAL

Well 7120/1-4 S was drilled on the 7120/1-3 Gotha structure, situated on the southern end of the Loppa High in the Barents Sea. The discovery well 7120/1-3 found oil and gas in Late Permian karst carbonates of the Røye Formation. The primary objective of 7120/1-4 S was to test the reservoir properties and hydrocarbon potential of the Gohta Karst prospect. The secondary objective was to test the reservoir properties and hydrocarbon potential of a potential sandstone sequences in the Kobbe, Klappmyss and Havert formations.

OPERATIONS AND RESULTS

Appraisal well 7120/1-4 S was spudded with the semi-submersible installation Island Innovator on 23 May 2014 and drilled to TD at 2520 m (2520 m TVD) in the Late Permian Røye Formation. No significant problem was encountered in the operations. The well was originally planned as an "S" shaped well. This was due to geological hazards connected to a deep-seated fault. Since TD was set 450 m shallow to plan, no deviation was necessary and the well became vertical despite the "S" denotation in the well name. The well was drilled with seawater and hi-vis pills down to 665 m and with Aquadril mud from 665 m to TD.

The well encountered blocky sandstones in the upper (764.5-802.5 m) Snadd Formation and thin sandstone beds in the lower Snadd target (interval 1200 to 1300 m), but the reservoirs proved water filled. The Kobbe and Klappmyss formations had no reservoir development. A 12.5 m thick mainly gas bearing conglomeratic sandstone unit (interval 2301-2313.5 m), was found at the Permo-Triassic boundary. This unit had pressure gradient almost identical to that of 7120/1-3, indicating a pressure communication between 7120/1-3 and 7120/1-4 S. Stratigraphic age is uncertain but it is likely of Late Permian to Early Triassic in age. Carbonates consisting of partly dolomitic limestones with thin claystone laminae were found from the base of the cored conglomerates/breccia at 2315.77 m to TD at 2520 m. The Gohta Karst reservoir was poorly developed to absent in this well. The carbonates were hydrocarbon bearing, but due to poor reservoir quality, it was not possible to establish an oil-water contact.

Isolated hydrocarbon / oil shows were described at 750 m, 770 m, 850 m and 870 m. No further shows were observed before entering the conglomeratic breccia at 2301 m. Continuous shows were described from this depth to 2323 m, where it became more patchy. The deepest show described was at 2464 m.

A total of 112.25 m core was recovered in the interval 2306 to 2419.16 m (99.2% total recovery). MDT fluid samples were acquired from one station at 2308.57 m. The samples contained condensate. Single flash of the condensate gave a GOR in the range 5800 to 6800 Sm3/Sm3, liquid condensate density in the range 0.724 to 732 g/cm3, and gas gravity in the range 0.667 to 0.670 (air = 1).

The well was permanently abandoned on 3 August 2014 as an oil and gas appraisal well.

TESTING

Two DST's were conducted.

DST 1A tested the carbonate oil zone in the interval 2335 to 2385 m. The test produced 30 Sm3 condensate and 160000 Sm3 gas through a 20/64" choke. It was found that the test produced gas from the gas zone above due to lack of cement behind the liner and that the tested carbonate interval contributed nothing to the flow.

DST 1A+B tested the interval 2335 to 2385 m + the conglomeratic breccia gas zone in the interval 2295 to 2312 m. This test produced 140 Sm3 condensate and 700000 Sm3 gas /day through a 52/64" choke. The GOR was 4500 Sm3/Sm3, the liquid condensate density was 0.730 g/cm3 and the gas gravity was 0.699 (air = 1). H_2S and CO_2 was less than 1 ppm and 1.1 %, respectively.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7120/1-4 S