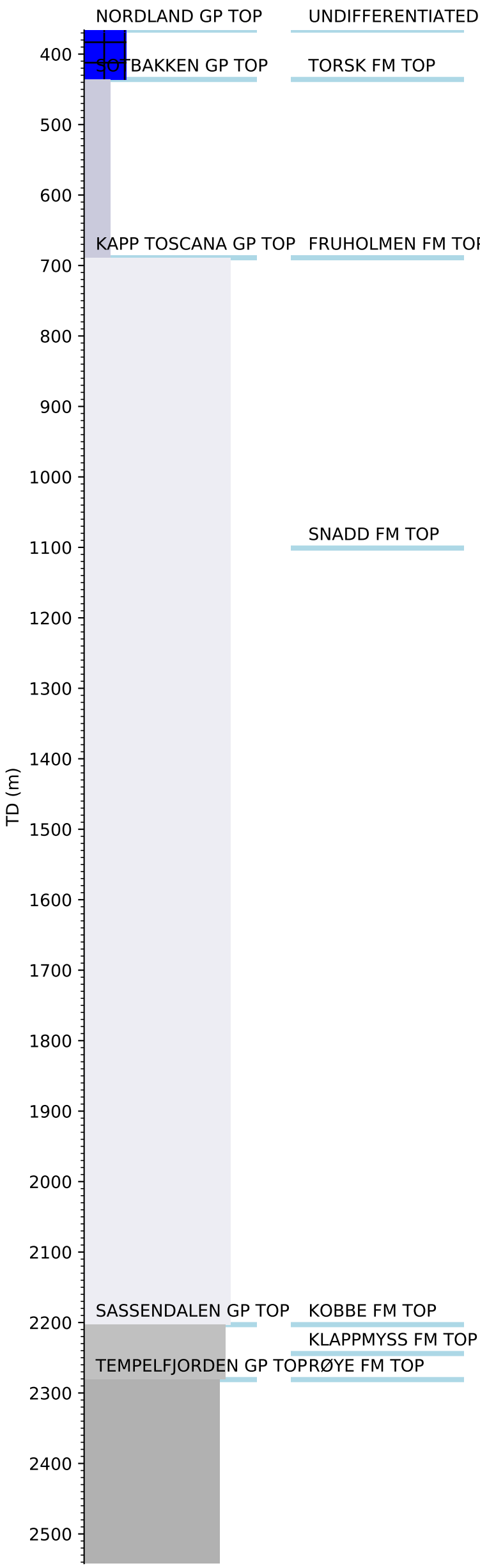

Wellbore History

GENERAL

Well 7120/1-3 was drilled on the Gotha prospect on the southern end of the Loppa High in the Barents Sea, ca 1.8 km south-west from well 7120/1-1. An 8 ½" pilot hole was drilled from seabed at 366 m to 665 m to check for shallow gas, which was not observed. The primary objective was to test the reservoir properties and hydrocarbon potential in sandstones of the Snadd Formation and in karstified carbonate at the top of the Permian Røye Formation. The secondary objective was to test a 10 m sandstone sequence at the top of the Kobbe Formation.

OPERATIONS AND RESULTS

Wildcat well 7120/1-3 was spudded with the semi-submersible installation Transocean Arctic on 16 July 2013 and drilled to TD at 2542 m in the Permian Røye Formation. The well was drilled with seawater and hi-vis sweeps down to 665 m and with KCl/Polymer/GEM water based mud from 665 m to TD.

The well encountered sandstones in the Gotha Snadd target, but the reservoir proved water filled and the reservoir properties were found to be on the low side. The expected Kobbe Formation sandstone was poorly developed with only a tight siltstone present. Permian karstified carbonates were penetrated at 2281 m. These carbonates contained a gas column of 34 meters (GOC at 2310.3 m) and an oil column of 75 meters (OWC at 2389 m).

First oil show was observed in a sandstone at 700 m in the Fruholmen Formation. A second interval in the Fruholmen Formation, from 770 to 780 m also had weak oil shows. Weak oil shows were described from 1758 to 1835 m in the Snadd Formation. The Røye Formation had oil shows throughout the petroleum-bearing reservoir. Oil shows (fluorescence, but no stain or odour) continued below the OWC down to TD in the well.

A total of 50.15 m core (86% recovery) was recovered in six successive cores in the interval 2288.5 to 2346.8 m in the karstified carbonates. The core to log depth shifts for cores 1 to 6 were -3.25 m, -3.57 m, -3.67 m, -4.53 m, -4.91 m, and -4.91 m, respectively. RCI fluid samples were taken at 2305.5 m (gas), 2315.7 m (oil), 2361.6 m (oil), and 2477.5 m (water).

The well was permanently abandoned on 7 October 2013.

TESTING

A drill stem test was conducted over the interval 2336.8 to 2377.3 m in the Røye Formation carbonates. The DST produced after acid treatment of the formation approximately 683 Sm3 oil and 220000 Sm3 gas /day through a 44/64" The GOR was 322 Sm3/Sm3. The DST temperature at 2349 m was 91.2 °C. This was the first successful DST in Permian carbonates on the Norwegian Continental Shelf. The main flow of the reservoir was stable over 24 hours and confirmed good production properties of the reservoir.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7120/1-3