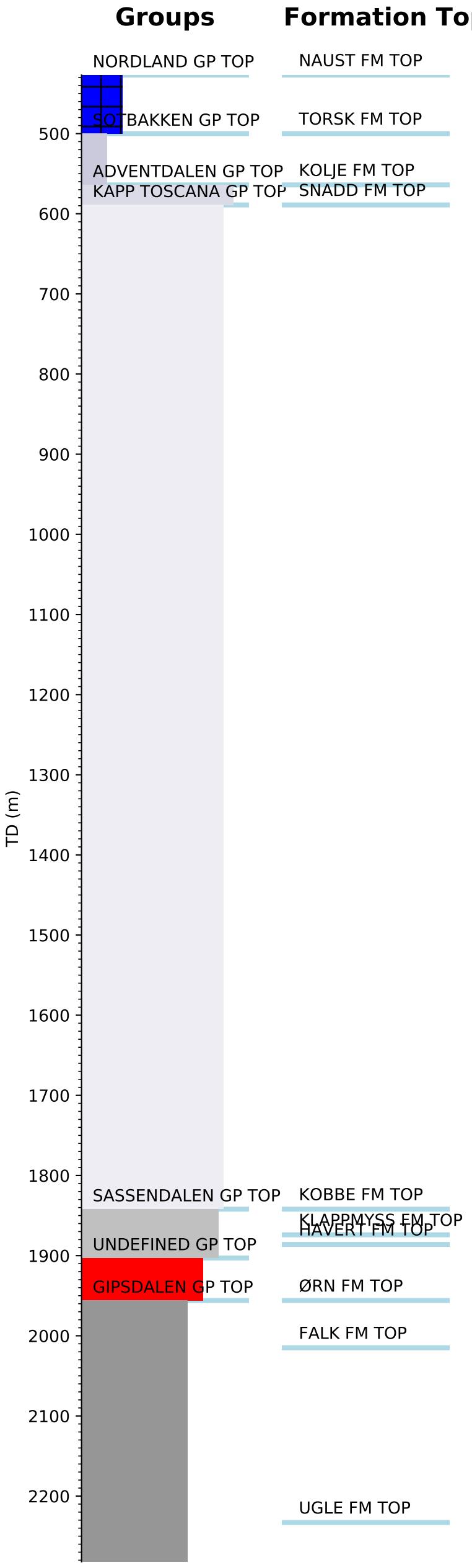

Wellbore History

GENERAL

Well 7220/11-4 was drilled to appraise the Alta discovery on the southern Loppa High in the Barents Sea. The primary objective was to delineate the eastern extent of the Alta discovery and prove the presence of hydrocarbon columns and fluid contacts similar to those established in the discovery well.

OPERATIONS AND RESULTS

Appraisal well 7220/11-4 was spudded with the semi-submersible installation Leiv Eiriksson on 10 May 2017 and drilled to TD at 2282 m in the Carboniferous Ugle Formation. Operations proceeded without significant problems. The well was drilled with seawater and sweeps down to 471 m, with KCl/Polymer/GEM mud from 471 to 648 m and with Performadril mud with 3.0 – 3.6% glycol from 648 m to TD.

The top of the reservoir was encountered at 1903 m. The well encountered a gross hydrocarbon column of 46.3 m, comprising 1.6 m of gas and 44.7 m of oil in a sequence of Permian-Triassic clastic carbonate sediments, conglomerates and breccias. The gas-oil contact (GOC) was found at 1904.6 m and the free-water level (FWL) at 1949.3 m. The pressure data confirmed similar fluid contacts and gradients to those observed in the previous wells drilled on the Alta discovery, suggesting good communication across the large Alta structure.

Above the oil-bearing reservoir there were oil shows in the Snadd Formation at 620 m, 860 – 930 m, and 1080 – 1288 m. These were described with direct, cut and residue fluorescence. The strongest shows, at 620 m, were associated with high gas levels between 600 and 650 m. Below the oil reservoir oil shows were described down to 2061 m.

Seven cores were cut in the interval 1904 to 1994 m. Cores 1 – 5 were cut in the 8 ½" section, while cores 6 and 7 were cut in the 6" section. MDT fluid samples were taken in the 8 ½" section at 1903.2 m (gas), 1912.6 m (oil), 1920.52 m (oil), and 1934.71 m (oil). One XPT water sample was taken in the 6"section at 1988.49.

The well was permanently abandoned on 17 July 2017 as an oil and gas appraisal.

TESTING

A DST was performed in the oil zone, the perforated interval was from 1923 to 1936.3 m in the oil zone. In the main flow the test produced 960 sm3 oil and 93800 Sm3 gas /day through a 56/64" choke. The GOR was 97 Sm3/Sm3, the oil density was 0.825 g/cm3 and the gas gravity was 0.706 (air = 1). Measured CO_2 and H_2S was up to 3% and 1.4 ppm, respectively. The static formation temperature estimated from Metrol Prolog test data is 71 °C at 1939.3 m.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7220/11-4