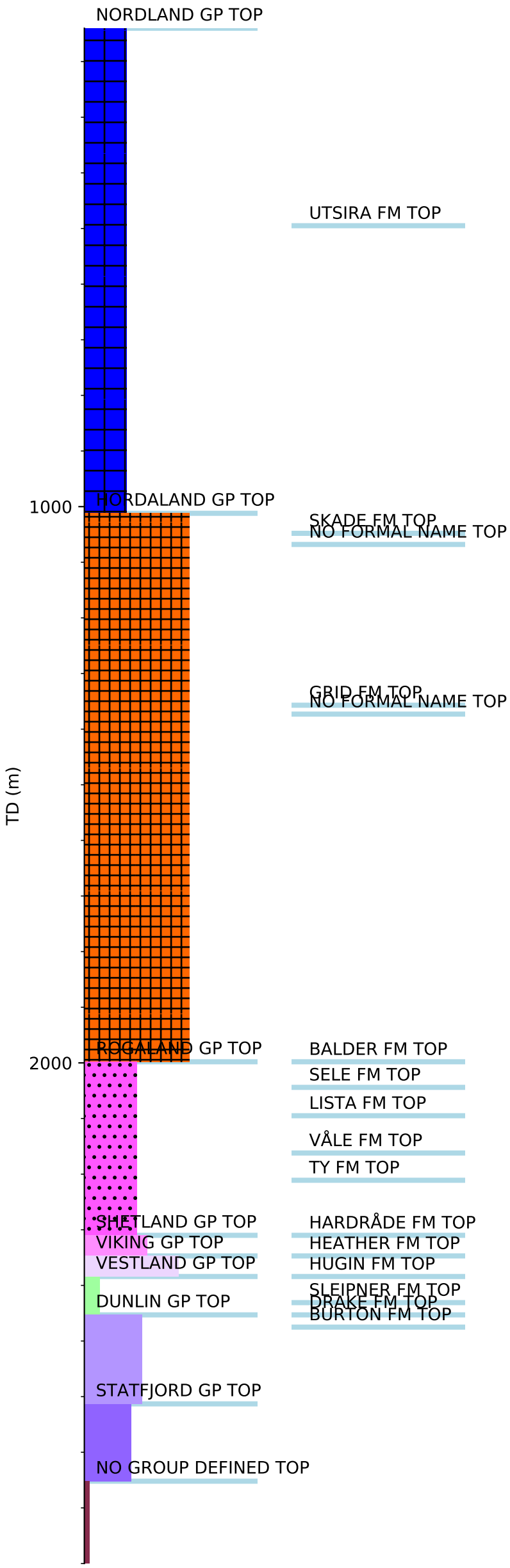

Wellbore History

Wildcat well 25/5-3 is located on the Utsira High, ca 15 km south-south-east of the Frøy Field in the North Sea. The main target was a prospect at Middle Jurassic level. Early Palaeocene sandstones and Early Jurassic Statfjord sandstones were secondary targets. For all targets the expected fluid was oil.

OPERATIONS AND RESULTS

Well 25/5-3 was spudded with the semi-submersible installation West Vanguard on 27 January 1990 and drilled to TD at 2900 m in the Triassic Group. No significant problems were encountered in the operations. The top hole down to 200 m was drilled with sea water. The reservoirs were drilled with sea water / KCl / polymers.

Two massive, clean, sandstone intervals (22 and 61 m) were found between 2211 and 2310 m in the basal Tertiary (Ty Formation). The sands were separated by a shaly layer and were water bearing (no shows at all). The Vestland Group reservoir was 69 m thick (2384-2453 m) and consisted of sandstones, generally fine grained, clean, occasionally micaceous/shaly and calcareous cemented. It was gas-bearing at top (gas column 42 m). The gas-water contact was found at 2426 m, based on logs and RFT pressures. Oil shows were observed on two sidewall cores at 2425 and 2428.7 m, but the amount of hydrocarbons (Iatroscan) obtained by geochemical studies were very low. No evidence of an oil zone could be seen on the RFT plot. The upper 21 m had very good reservoir qualities with porosities above 25%, and average horizontal and vertical permeabilities of Kh = 363 mD and Kv = 236 mD, respectively. The basal part had porosities around 20 %. For the total Brent the N/G was ca 77 %. The Statfjord Formation was 139 m thick (2613-2752 m) and consisted of alternating sandstones and shales. The N/G was around 63 % with an average porosity of 25 % for the reservoir levels. Some sandy levels had very good petrophysical characteristics (permeabilities above one Darcy). These reservoirs were water bearing. Apart from the two questionable oil shows at the base of the gas zone no oil shows were recorded in the well.

Two conventional cores were cut. One was cut from 2386 to 2404 m in the Hugin Formation, and the other from 2615 to 2628 m in the Statfjord Formation. No wire line fluid samples were taken.

The well was permanently abandoned on 26 March 1990 as a gas/condensate discovery.

TESTING

The top Vestland Group reservoir was perforated and tested in the interval 2386 - 2405 m. Maximum flow was 585 000 m3 of gas with ca 120 Sm3 condensates /day through a 40/64" choke. The GOR was 5100 - 6200 m3/m3 depending on the separator temperature. The condensate density was 0.755 - 0.766 g/cm3 and the gas gravity (air = 1) was 0.678 - 0.692. The temperature at end of build-up was 85 deg C.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 25/5-3