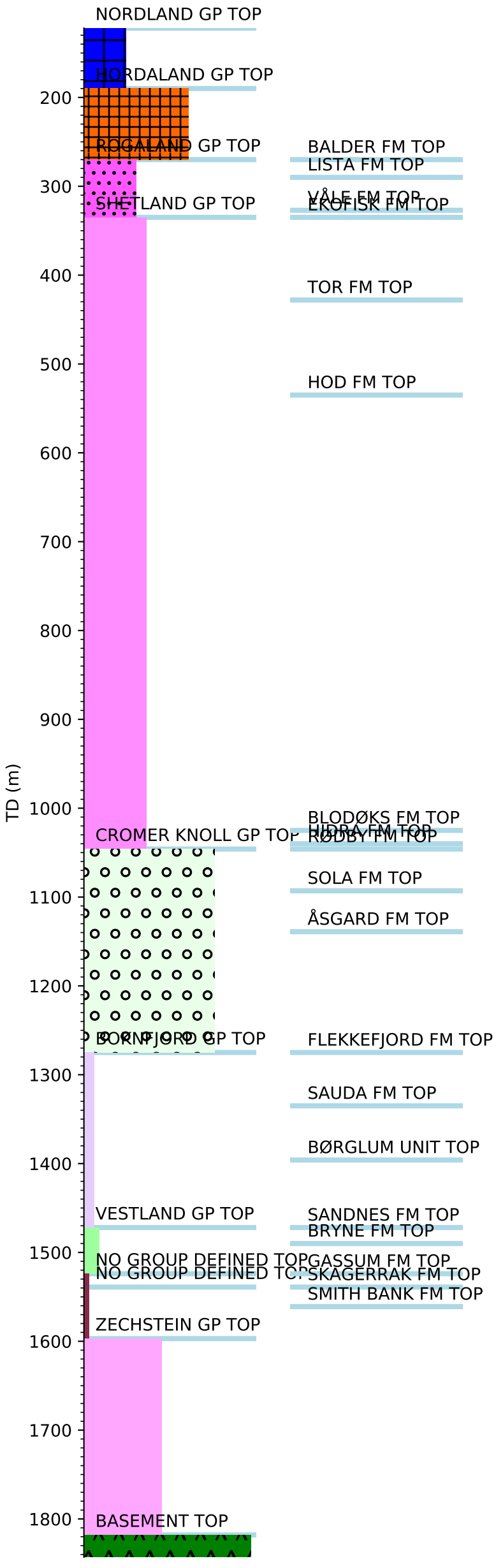

Wellbore History

GENERAL

Well 10/5-1 was designed to test a tilted fault block with an overlying pinch out trap in the eastern part of the Norwegian-Danish basin. The primary objective was Rotliegendes sands. A probable 460 m gross thickness was anticipated. A secondary objective was Middle Jurassic sandstones with an estimated gross thickness of 61 metres. Other possible objectives were the Early Cretaceous sandstones and Basal Zechstein carbonates.

The well is Illustration Well for the Børglum Unit of the BoknFjord Group.

OPERATIONS AND RESULTS

Exploration well 10/5-1 was spudded with the semi-submersible installation Norjarl on 31 May 1976 and drilled to TD at 1843 m in crystalline granite dated by the potassium-argon method to apparently 689 ± 21 My (Late Precambrian). After drilling the 36" section to 189 m the hole had washed out under the temporary guide base. The guide base sank 26 feet below the mud line and the 30" casing could not be stabbed through the guide base. The rig was moved 38 m and the hole was respudded. The well was drilled with seawater / gel down to 501 m, with Inpac polymer mud from 501 m to 1768.2 m, and with lignosulphonate mud from 1768.2 m to TD.

The well penetrated a gross thickness of 67 metres of Middle Jurassic (Sandnes Formation) sandstones from 1472 m to 1539 m. Porosity was good, but there were no hydrocarbon indications while drilling, and subsequent log analysis confirmed that the objective horizons were water wet. Triassic sandstones were also encountered, but these were extremely shaley, and had no clean sandstone sections. Rotliegendes sandstones were not present at the 10/5-1 location. The base of the Zechstein interval was represented by a clear, white, light brown, hard, very angular sandstone, cemented with siliceous cement and extremely tight. Organic geochemical analyses found fair to rich TOC (1 - 5%) in the Early Cretaceous and Late Jurassic and possibly in some Permian shales. The Permian TOC could be caved Late Jurassic material. Rock-Eval pyrolysis of the high-TOC samples gave low S2 yields, so the kerogen has low hydrocarbon potential and is most likely gas prone. The entire well was found to be immature. Minor amounts of migrant hydrocarbons were detected by the geochemical analyses in the late Jurassic and the Cretaceous.

A junk basket core was recovered from 533.4 m to 534.3 m. No conventional core was cut. Thirty sidewall cores were attempted over the interval 1250 m to 1812 m. Eighteen of these were recovered. No fluid samples were taken.

The well was permanently abandoned on 26 June 1976 as a dry hole.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 10/5-1