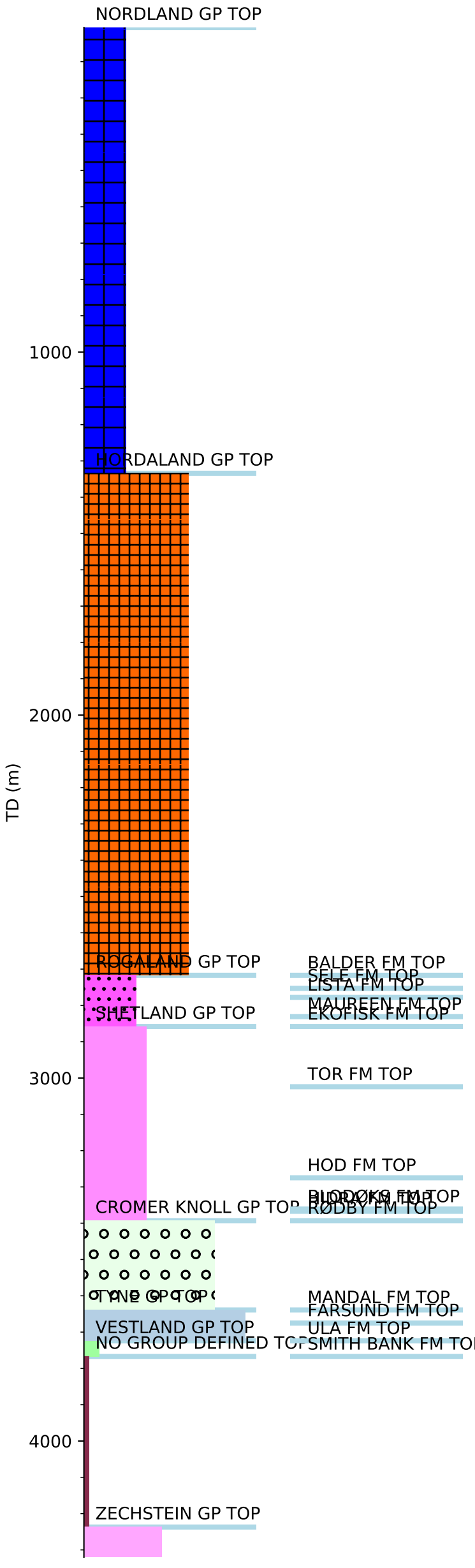
Groups

Formation Tops



Wellbore History

GENERAL

Well 7/8-3 is located in the North Sea, north of the Mime field on the margin of the Cod Terrace. The primary objective of 7/8-3 was to explore the hydrocarbon potential of the Late Jurassic sandstones. Secondary objectives were to explore the Cretaceous Chalk and the Triassic sandstones. Planned TD was at 4275 m in Permian salt.

OPERATIONS AND RESULTS

Wildcat well 7/8-3 was spudded with the semi-submersible installation Borgny Dolphin on 12 September 1983 and drilled to TD at 4320 m in the Late Permian Zechstein Group. While running 13 3/8" casing this got stuck and had to be pulled out of the hole. The hole was cleaned and new casing was set without further complications. Otherwise no significant problems were encountered during drilling. The well was drilled with spud mud down to 199 m and with KCl polymer mud from 199 m to TD.

The Cretaceous Chalk was encountered at a depth of 3024 m, the Late Jurassic Ula Formation at 3724 m, and the Triassic at 3767 m. The Ula Formation sandstones were hydrocarbon bearing within a 43.5 m gross sand interval. No oil/water contact was encountered. Oil shows were recorded in shales and porous sections from 3699 m to 3751 m.

Four cores were cut in the interval 3731 m to 3773 m, three in the Upper Jurassic Ula Formation and one into Upper Triassic sandstones. A RFT fluid sample from the Triassic section at 4049.5 m recovered only mud filtrate.

The well was permanently abandoned on 12 December 1983 as an oil discovery.

TESTING

Two DST's were performed in the Ula Formation sandstones: DST 1 from interval 3762 m to 3767 m, and DST 2 from interval 3734.5 m to 3740.5 m. The first produced oil at a slightly declining rate during the final 5-hours flow period, the average rate being 207 Sm3/day through a 2" choke. The GOR was 32 Sm3/Sm3, API oil gravity was 29 deg, and gas gravity was 0.88 (air = 1). The second DST produced 70 Sm3 oil/day through a 2" choke. API oil gravity was 29 deg . Gas was also produced, but the rate was not obtainable. Reservoir temperatures based on the DST measurements were 156 deg C in DST 1 and 154 deg C in DST 2.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7/8-3