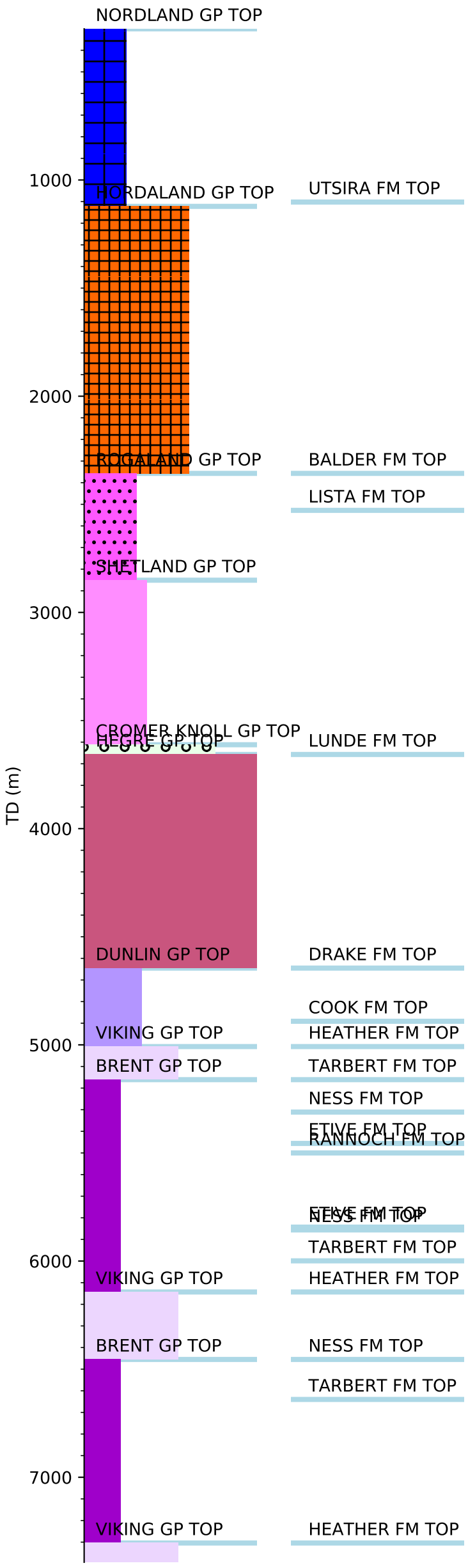

Wellbore History

GENERAL

Well 34/10-48 S was drilled on the Gullfaks Field in the Northern North Sea, from the Gullfaks C platform. The main objective was to test the hydrocarbon potential of the Brent Group in the Topas prospect. The secondary objectives were to test the hydrocarbon potential in 3 leads; the Nesle lead east of the Topas prospect, the U2 lead in the slope of the Gullfaks Horst and Late Jurassic at the base of the main bounding fault limiting the Gullfaks Structure to the east. The well should be completed as a producer.

OPERATIONS AND RESULTS

Well 34/10-48 S was spudded from a preset 32" conductor at slot 29 on the Gullfaks C platform on 17 March 2004.

The planned well was a very challenging one, with a complex and highly deviated well path. Deviation from vertical was 11 deg at 438 m and was increased to ca 66 deg from 1500 m. When entering the Lunde Formation inclination was 56 deg, and from ca 5500 m in the Brent Group and to TD the well path was kept approximately horizontal. It was planned drilled in 4 sections, 24", 17 1/2", 12 1/4" and 8 1/2". The planned TD of the well was 6848 m. Information gathered while drilling the 8 1/2" section led to a change in plans and the well path in the reservoir was changed and extended with 550 m. The well 48 S was drilled to 7393 m. The well was drilled with spud mud in the 24" section from 443 m to 1355 m, with Glydril mud in the 17 1/2" section from 1355 m to 2610 m, and with Versavert oil based mud in the remaining sections from 2610 m to TD.

The well was classified as exploration well from 3600 m. The Lunde Formation was penetrated at 3657 m. Hydrocarbon filled sandstones in this Formation (the U2 lead) were encountered at 4272 m /2470 m TVD, while the sandstone layer at the base of the main bounding fault, at 4891 m / 2800 m TVD, was water filled. The Topas prospect was penetrated some 7.5 m shallow to prognosis. The well drilled through hydrocarbon filled Tarbert Formation and into water filled Ness Formation. Since the well drilled water filled Ness, Etive and Rannoch Formations the well path was revised and the Nesle lead was drilled higher on the structure. The well drilled through some hydrocarbon filled Late Jurassic sands (Intra Heather Formation sandstone) before entering hydrocarbon filled sands of the Ness and Tarbert Formations of the Topas prospect in the PL120 licence. The well path was steered down and the oil water contact was found at 7133 m /2929 m TVD RKB in the Tarbert Formation. The preliminary results of the well 34/10-48 S indicated that the well path had penetrated low on the Topas structure and that the well path was not ideal for production. It was therefore decided to drill a sidetrack and aim as high on the re-interpreted structure as possible.

One core was cut in the Tarbert Formation from 5174 to 5207.15 m. MDT fluid samples were collected at 4372 m, 4455 m, 4492 m and 4533 m in the Lunde Formation. All samples contained oil with relatively high gas/oil ratio.

Well bore 34/10-48 S was plugged back to 5060 m and permanently abandoned on 22 December 2004 as an oil discovery. Well side track 34/10-48 A was initiated.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 34/10-48 S