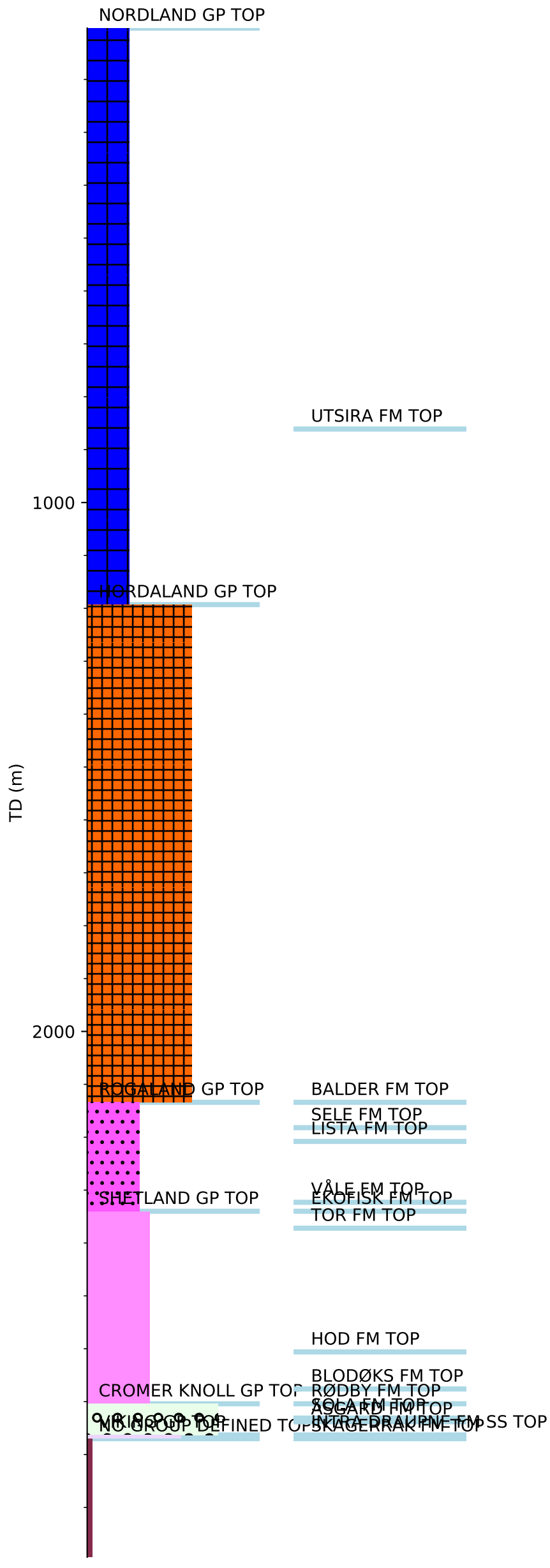
Groups

Formation Tops



Wellbore History

GENERAL

Wildcat well 16/7-7 S is located in the southern end of the Sleipner Terrace in the Norwegian North Sea. The primary objective of the well was to evaluate the resource potential of the eastern segment of the A-North prospect in the Triassic Skagerrak Formation. The western segment had been drilled in 1982 by well 16/7-4, which proved gas and condensate in sandstones of Jurassic/Triassic age.

OPERATIONS AND RESULTS

Well 16/7-7 S was spudded with the semi-submersible installation Stena Dee on 20 October 1997. The well was drilled to 2745 m (2473.3 TVD SS) in the Cretaceous section. The bottom hole assembly was lost and the well was sidetracked. Well was sidetracked from 1777 m and was drilled to TD = 2994 m (2704.8 m TVD SS) in the Skagerrak Formation. The final well with sidetrack was drilled with seawater down to 1146 m and with Ancotec oil based mud from 1146 m to TD.

The well found high-volatile oil in Intra Draupne Formation Sandstone and Skagerrak Formation sandstone, from 2763 m (2517.2 m TVD SS) down to a Free Water Level at 2860.3 m (2596.9 m TVD SS). Logs, wire line pressure measurements, drill stem tests, and shows confirmed the hydrocarbon column. There were no shows or other hydrocarbon indications reported from above or below the reservoir section

Five cores were cut in the interval 2735.5 - 2887.5 m in the Åsgard Formation, the Intra Draupne Formation Sandstone, and the Skagerrak Formation. All cores were cut in the final sidetrack hole. No wire line fluid samples were taken.

The well was permanently abandoned on 29 December 1997 as an oil discovery.

TESTING

Two drill stem tests were performed. DST 1 tested the interval 2785 - 2852 m (2535.5 - 2590.2 m TVD SS) in the Skagerrak Formation. The well flowed at maximum 514 Sm3 oil/day on a 44/64" choke. The GOR was ca 517 Sm3/Sm3, the oil gravity was ca 59 deg API, and the specific gas gravity was 0.94 (air = 1). DST 2 tested the interval 2762 - 2852 m (2516.7 - 2590.2 m TVD SS), which includes the Intra Draupne Formation Sandstone in addition to the upper Skagerrak Formation. DST 2 flowed at maximum 563 Sm3 oil/day on a 44/64" choke, and the Production Logging Tool (PLT) indicated that most of the flow in this test came from the Intra Draupne Formation Sandstone. The GOR was ca 450 Sm3/Sm3, the oil gravity was ca 59 deg API, and the specific gas gravity was 0.94 (air = 1). The reservoir temperature was reported as 100 deg C in both tests.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 16/7-7 S