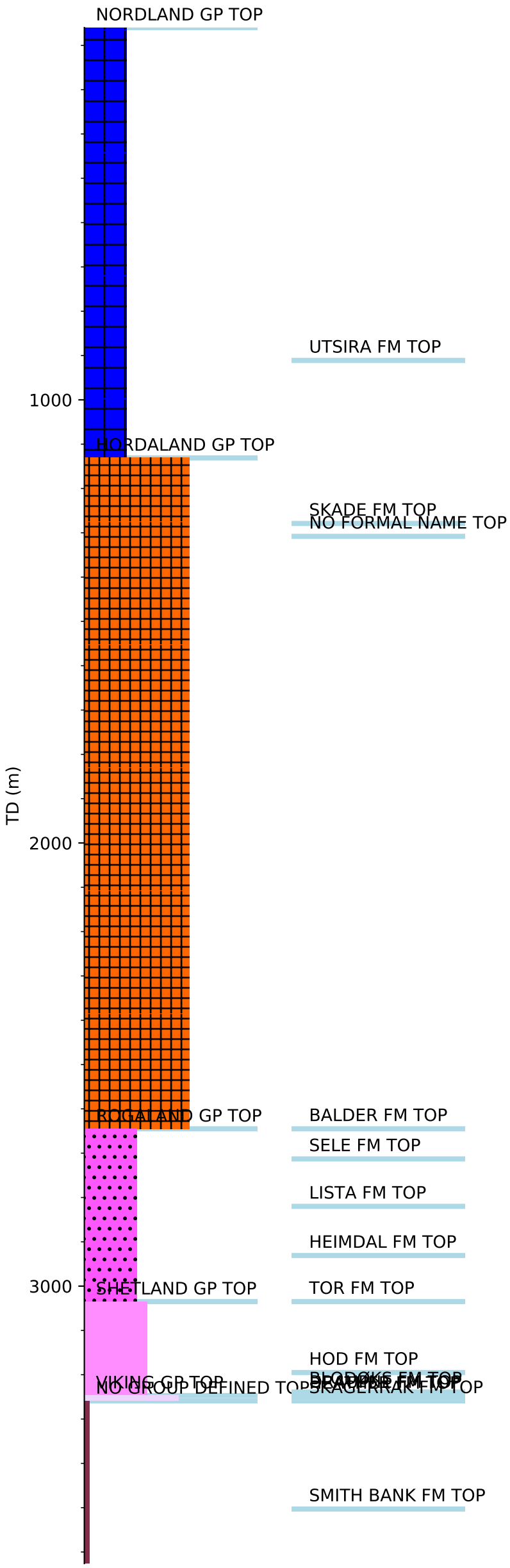
Groups

Formation Tops



Wellbore History

GENERAL

Wildcat well 15/9-20 S was drilled from the Sleipner A platform on the Sleipner øst Field. It started off as development well 15/9-A-22, which was designed to provide gas production from the Heimdal reservoir in the central part of the Sleipner Øst Field, and to contribute with geological and reservoir technical data for optimal reservoir management in this area. Due to unexpected geology in the deeper part of the well the Cretaceous and below was reclassified to exploration well 15/9-20 S.

OPERATIONS AND RESULTS

Well 15/9-20 S was spudded from the fixed installation Sleipner A on 16 February 1994 and drilled deviated to TD at 3624 m in the Triassic Smith Bank Formation. No significant problems were reported from the operations. The well was drilled with seawater/PAC mud from below 26" conductor to 506 m, with KCl/PHPA/PAC mud from 506 m to 1735 m, with KCl/PHPA/PAC/Glycol mud from 1735 m to 2928 m, and with ester mud from 2928 m to TD. No shallow gas was encountered.

The well penetrated the Heimdal Formation target at 2931 m (2279.6 m TVD MSL), 11.6 m TVD deeper than prognosis. The Heimdal Formation was 104 m thick (71.2 m TVD) and proved to be gas filled as expected. Under the Heimdal Formation the well drilled 204 m Late Cretaceous limestone overlying 8 m Blodøks Formation. At 3247 m (2490.2 m TVD MSL) the well drilled unexpected into Jurassic/Triassic sandy sediments, which proved to have a 30 - 50 m TVD hydrocarbon leg.

Five conventional cores were cut from 2940 - 3043 m in the Heimdal and into the top of the Tor Formation. A sixth core was cut from 3216 - 3244 m, from base Hod Formation and into the Blodøks Formation. One RFT segregated sample was taken at 3272.6 m in the Skagerrak Formation.

Well bore 15/9-20 S was plugged back and permanently abandoned on 1 June 1994 as a gas discovery.

TESTING

The well was perforated on wire line over the interval 3229 - 3238 m in the base of the Hod Formation and stimulated with acid, but the result was negative and the interval was plugged. Two drill stem tests were performed in the Heimdal Formation sandstone. DST 1 tested the interval 2942 - 2956 m and DST 2 tested the interval 2933 - 2942 m.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 15/9-20 S