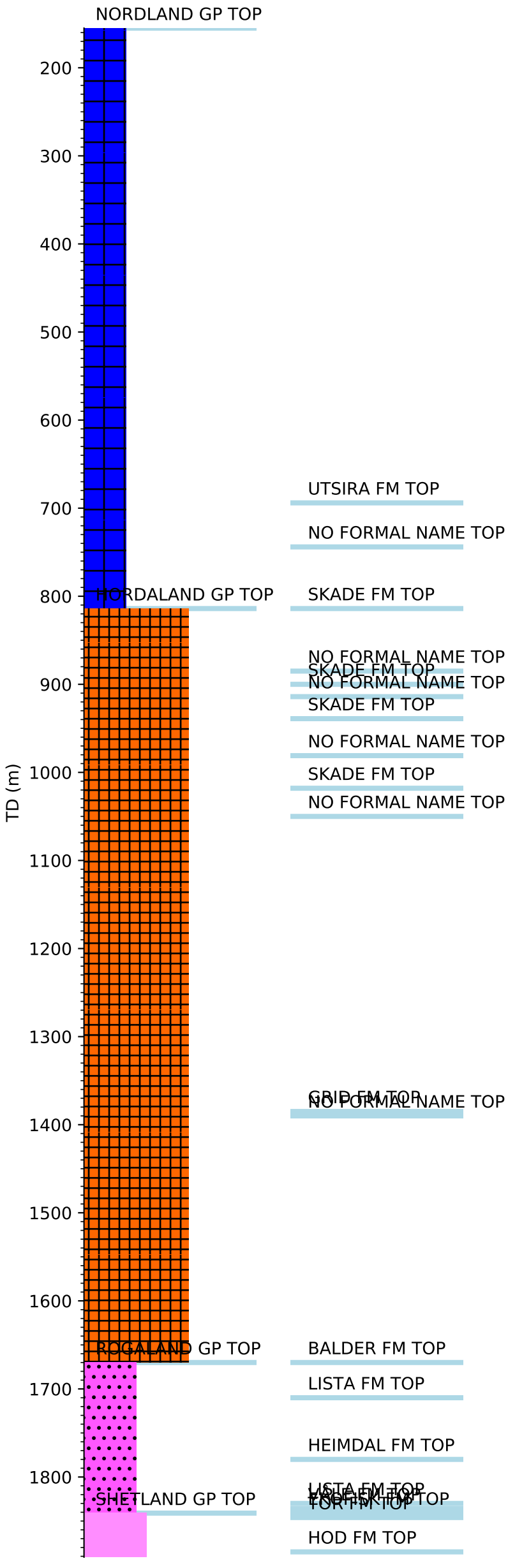
Groups

Formation Tops



Wellbore History

GENERAL

Well 25/8-4 was drilled o the Utsira High, in the vicinity of the Balder Field area in the North Sea. The main objective was to test the hydrocarbon potential of the Paleocene sand in the Hedila structure, a seismic mounded structure within the prospect area. The location of the well was chosen in an area were thick sands were expected to be found in a high structural position. Additional targets were additional younger sand development in the Lista and Sele Formation.

OPERATIONS AND RESULTS

Wildcat well 25/8-4 was spudded with the semi-submersible installation Vildkat Explorer on 25 July 1992 and drilled to TD at 1891 m in the Late Cretaceous Hod Formation. No significant problems were encountered during operations. The well was drilled with spud mud down to 241 m and with polymer mud from 241 m to TD. No shallow gas was observed.

The Lista Formation was encountered at 1710 m. A sequence of thin Heimdal Formation injection sands was recognised in the Lista Formation in the interval down to 1780 m where a 50 m thick massive Heimdal Formation was encountered. In total these injection sands made up 5.9 m net sand, which was all hydrocarbon bearing. Average porosity in this net was 32.0% with an average Sw of 10%. The main Heimdal Formation was found mainly water wet, with only a 1.5 m oil column from the top and down to an OWC at 1781.5 m (1756.5 m TVD MSL). Average porosity in the main Heimdal Formation was 33.9%. Oil shows in the Paleocene sandstones started to appear in top Balder Formation at 1670 m and ended in the OWC in the Heimdal sandstone at 1782 m. In addition, poor shows were observed on limestone over the interval 1841 m - 1852 m in the Ekofisk Formation.

Twelve cores were cut from 1659.6 m, in the lower part of the Hordaland Group, through the Balder, Lista and Heimdal Formations to 1840 m, 4 m into the top of the Våle Formation. Four good RFT pressure points were recorded in the Lista Formation giving a fluid density of 0.817 g/cc. One fluid sample was collected 1750.7 m and consisted of a mixture of 23 deg API oil, mud filtrate, and gas. Nine good RFT pressure points were taken in the main Heimdal Formation, resulting in a density gradient of 1.02 g/cc in the water zone.

The well was permanently abandoned on 11 August 1992 as an oil discovery.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 25/8-4