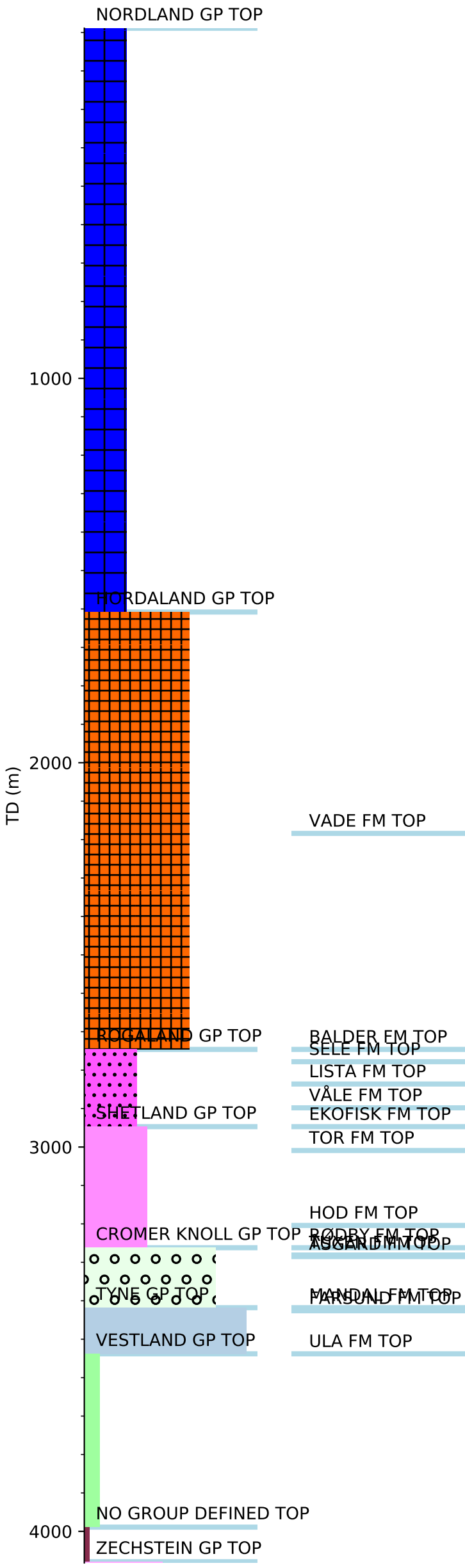
Groups

Formation Tops



Wellbore History

GENERAL

The main objective of the exploration well 2/2-5 was to test the hydrocarbon potential of the Upper Jurassic Ula Formation situated in the Epsilon structure. The structure is a salt induced anticline situated on a rotated, down thrown fault block in the Ula-Gyda Fault zone. The Oligocene Vade Formation was the secondary target. A seismic anomaly indicated a potential gas accumulation in this zone.

OPERATIONS AND RESULTS

Well 2/2-5 was spudded by the semi submersible rig Treasure Saga on November 7 1991 and completed February 20 1992 in Permian Zechstein Group. The well was drilled with spud mud down to 918 m, with KCl mud from 918 m to 3484 m, and with HITEMP Polymer mud from 3484 m to TD.

The well penetrated mainly claystone with minor sandstone in Nordland, Hordaland, and Rogaland Group. The Vade Formation (within Hordaland Group) proved to be water bearing. After drilling throughout a typical sequence of the Shetland and Cromer Knoll groups, the top of the Tyne Group was encountered at 3418 m. The Ula Formation, which was reached at 3538 m, consisted of an interbedded sequence of sandstone, siltstone, and shale.

A 5-meter thick oil bearing zone within the Ula Formation was encountered at 3671 m. An attempt made to obtain an oil sample using RFT failed as the fluid chambers contained mud filtrate only. Geochemical analyses of oil from the DST revealed an unusual chemical and isotopic composition unlike any oil in the area. Sediments interpreted to be Triassic age were penetrated at 3989 m and may represent either a fault gouge above salt or the up thrown fault block. The well was permanently abandoned as an oil discovery on 19 February 1992.

TESTING

One DST test was performed over the interval 3671.25 m to 3675.5 m. The well flowed oil at maximum rate 600 Sm3 / day. The oil had a density of 0.86 g/cm3 and the GOR was 44.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 2/2-5