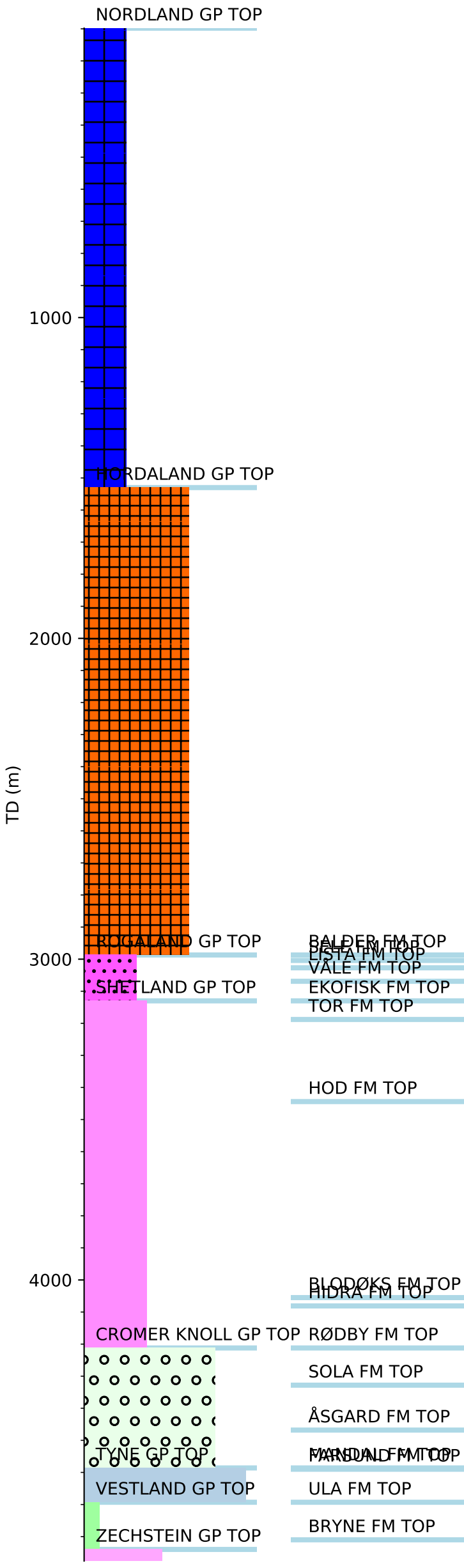
Groups

Formation Tops



Wellbore History

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GENERAL

Well 2/7-19 is located ca 10 km west of the Embla and Eldfisk fields in the southern Norwegian North Sea. The objective was to test the Danian - Late cretaceous limestone, and sandstones of the Early Cretaceous and Jurassic on a low relief structure. Well 2/7-19 was the third attempt to drill this prospect. The first two attempts, 2/7-17 and 2/7-18, were junked because of mechanical problems.

OPERATIONS AND RESULTS

Well 2/7-19 was spudded with the semi-submersible installation Borgny Dolphin on 2 September 1980 and drilled to TD at 4877 m in the Late Permian Zechstein Group. A total of 154 days on the location were used to drill and abandon the well. The well was drilled to a depth of 4785 m with 16.0 ppg mud. This was on 17 November. An estimated 12 m of Early Cretaceous sandstone had been penetrated and the drilling gas had increased after entering this zone, with some indications of hydrocarbons. The well was static with 16.0 ppg density mud, however the weight was raised to come out of the hole and commence coring. Upon raising the mud weight to 16.3 ppg a pack-off occurred which broke down a formation and circulation was lost. Circulation was re-established with 16.0 ppg mud. The mud weight was then raised in stages from 16.2 ppg to give an adequate trip margin to log. Logs were run, after which lost circulation problems again occurred. It took up to January 8 1981 before problems were cured and drilling could commence. The well was drilled with seawater and pre-hydrated bentonite down to 593 m, with seawater/bentonite/native solids from 593 m to 1600 m, and with seawater/Drispac/lignosulphonate from 1600 m to TD.

No hydrocarbons were encountered in the Danian - Late Cretaceous limestone. Some fluorescence was observed on limestones in the Tor Formation and in the Hidra Formation. Gas-bearing sands of the Ula Formation were encountered. Oil shows were recorded in these sands, generally described as dull yellow fluorescence and slow yellow cut.

One conventional core was cut from 3143.7 - 3162.0 m in the top of the Ekofisk Formation. One RFT fluid sample was recovered from 4772.2 m in an Ula Formation sandstone unit. The sample consisted of 50% gas-cut mud, where the gas gravity was 0.78 (air = 1). The RFT results indicated pressures too high to be safely tested with the rig equipment and BOP's on the rig at that time.

The well was suspended on 19 June 1989 pending further evaluation and possible testing.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 2/7-19