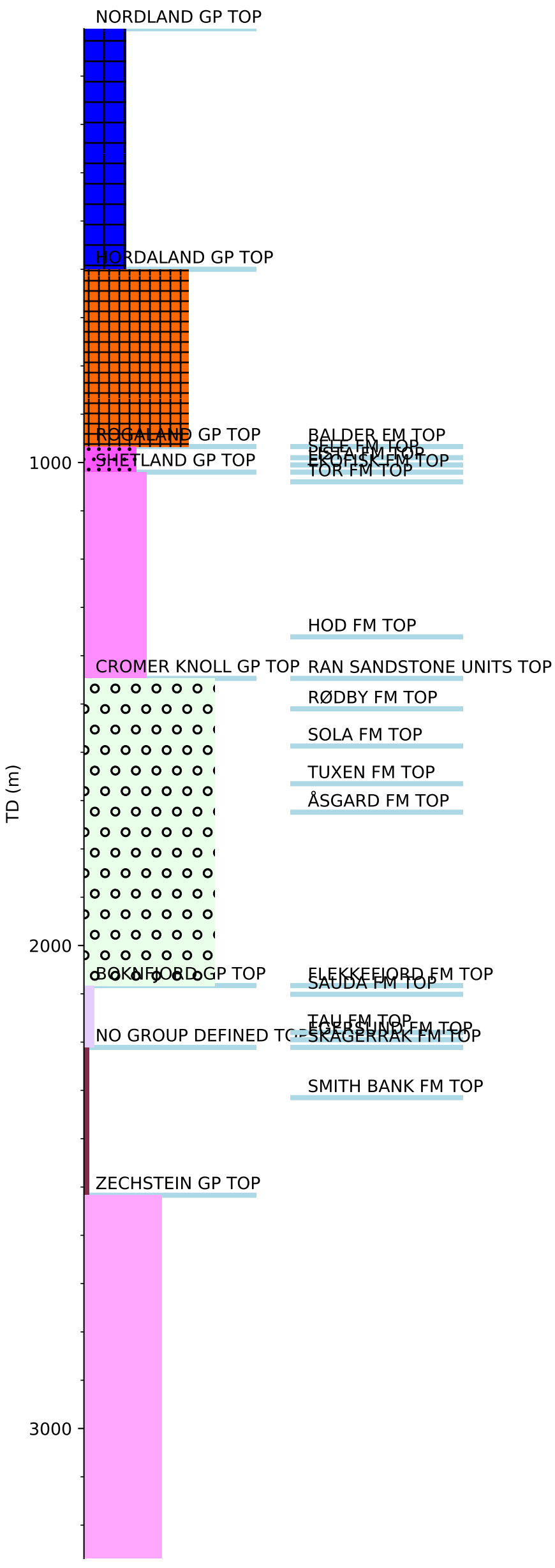

Wellbore History

GENERAL

Well 17/11-1 was drilled close to the western edge of the Sele High in the North Sea. The original objective to test the Tertiary and Mesozoic sequences, was extended to penetrate the Zechstein salt and investigate the underlying formations. This latter could not be reached due to drilling difficulties in the salt.

OPERATIONS AND RESULTS

Wildcat well 17/11-1 was spudded with the jack-up installation Orion on 24 May 1968 and drilled to TD at 3269 m in the Late Permian Zechstein Group. When logging at 1173 m the logging tool got stuck in the "gumbo" section and an inflow of 2 - 5 bbl/hr of salt water occurred. Several of the tools failed to reach the bottom, among these the gamma-ray/sonic logging tool. Therefore a laterolog is included on the final composite log in the interval 1017-1158 m. The pipe stuck when drilling in potassium and magnesium salt (carnallite). Efforts to free the pipe by jarring and spotting Pipelax were unsuccessful. After working the stuck pipe for 19 hours the drill string parted, leaving a bit and junk sub in the hole. An unsuccessful attempt was made to jar the fish free. It was then decided that further efforts to drill to the base of the salt could not be justified. The well was drilled with seawater down to 166 m, a Spersene/XP-20 mud system from 166 m to 2539 m, converting to a salt-saturated mud from 2539 m through salt to TD.

Shetland Group chalk (Ekofisk Formation) came in at 1020 m. Top Cretaceous is set at 1040 m where Tor and Hod chalks extend down to 1447 m. Porosities in the chalks were estimated between 15 % to 25%. At 1447 m 63 m of Ran Sandstone Units were penetrated. The remaining Early Cretaceous consisted of mudstones. The Boknfjord Group was encountered at 2083 m, with shales extending down to 2211 m. These shales rest directly on Triassic sediments. The Skagerrak Formation from 2211 m to 2315 m consisted of claystone with sand and siltsone stringers. The sandstone stringers were generally less than 2 m thick with 20 - 30 % estimated porosity. The Smith Bank Formation is set at 2315 m to 2517 m. From 2517 m to 2538 m anhydrite was present. Below 2538 m massive salt is shown on the logs with occasional beds of anhydrite and claystone. Between 3205 m and 3269 low density beds indicate carnallite interbedded with the normal halite. There were no hydrocarbon indications in the well.

Conventional cores were not cut. A total of 41 sidewall cores were taken from 427 m to 3226 m. No fluid samples were taken.

The well was permanently abandoned on 30 June 1968 as dry hole.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 17/11-1