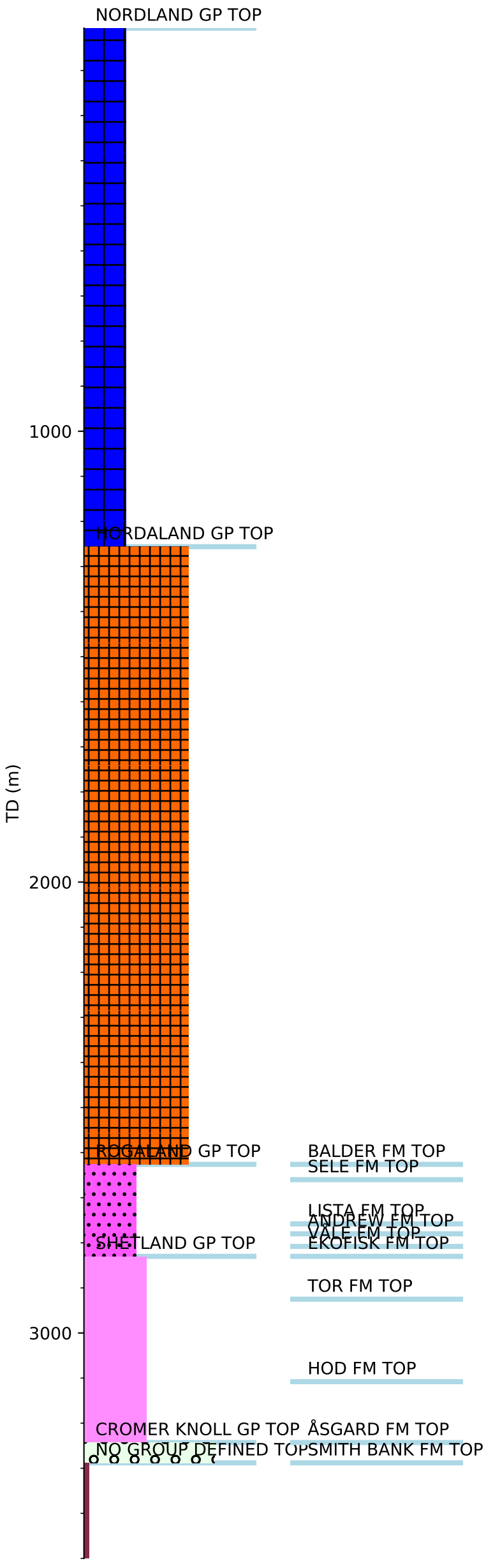
Groups

Formation Tops



Wellbore History

GENERAL

Well 7/7-1 was the first well in license 148, and was designed to drill a tilted block on the Jæren High close to the UK border. Early/Middle Jurassic events resulted in uplift and erosion, such that Jurassic sediments at the well location are missing. Due to the Tertiary uplift and eastward tilting of the Shetland Platform, along with a relative drop in sea level, this tilting gave rise to an eastward drainage pattern. Submarine fan sandstones derived from deltaic and barrier bar complexes in the Morray Firth area were deposited in the Central Graben and on to the Jæren High. Several lobe systems developed, giving rise to continuous and periodic sandstone deposition as the lobes migrated laterally. The eastern pinch out of these systems occurs in blocks 7/4 and 7/7. The primary objective of this well was an anticlinal closure at the Base Cretaceous Unconformity level, the C-prospect, Triassic sandstones. The secondary objective was the B-prospect, Paleocene sandstones, a possible closure along a pinch out of a sandy sequence consisting of distal turbidites. Some high amplitude anomalies indicated shallow gas between 241 to 395 m. The nearest one at 308 m was situated approximately 300 m east of the well location. Sticky and swelling "gumbo" clays are common in the area.

OPERATIONS AND RESULTS

Wildcat well 7/7-1 was spudded with the semi-submersible installation Deepsea Bergen 30 December 1989 and drilled to TD at 3500 m in the Triassic Smith Bank Formation. The well was drilled with seawater and gel down to 572 m, with gypsum/polymer mud from 572 m to 3263 m, and with bentonite/lignosulphonate mud from 3263 m to TD. Apart from some tight hole problems, drilling went without severe problems. No shallow gas was encountered. The well was drilled approximately 200 m into the Triassic, which consisted of brick red sandstones, interbedded with siltstone / claystone. The Paleocene sandstones came in nearly 60 m below the prognosed depth, and only minor amounts of sand was encountered (Andrew Formation). No indication of hydrocarbons was seen in this well. Two conventional cores were cut, one from 2786 m to 2803 m in the Paleocene Andrew Formation and a second from 3286 m to 3313.5 m driller's depth (3291.5 m to 3319 m loggers depth) in the Smith Bank Formation. A total of 125 sidewall cores were attempted, and 118 sidewall cores were recovered. No fluid samples were taken. The well was permanently abandoned on 20 February 1990 as a dry hole.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7/7-1