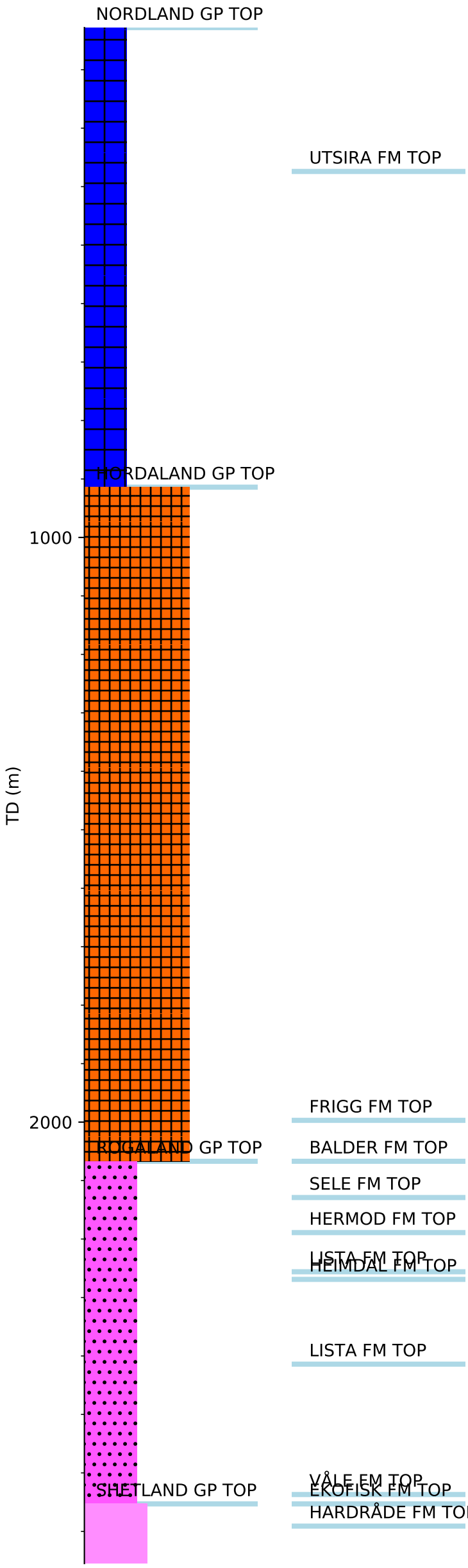
Groups

Formation Tops



Wellbore History

GENERAL

Well 30/10-2 was the discovery well for the Odin field, located North of the Frigg Field. The primary objective of the well were to evaluate the Early Eocene sands ("Frigg Field Clastic Tongue") predicted at 1954 m. Secondary objectives were to evaluate the Paleocene sands and the Danian / Late Cretaceous limestone prognosed from ca 2187 m to ca 2713 m.

OPERATIONS AND RESULTS

Exploration well 30/10 2 was spudded with the semi-submersible installation Drillmaster on 24 December 1973 and drilled to TD at 2755 m in Late Cretaceous (Maastrichtian) Hardråde Formation. The mud programme used was a seawater/Lignosulphonate system. Some drilling problems were encountered due to shale cavings. After drilling to 2026 m it was necessary to condition the hole several days due to caving shales. While drilling at 2147 m three cones were lost in the hole and when attempting to recover these, six feet of the bottom drilling string was left in the hole. The fish was recovered after several attempts. Later after setting 9 5/8" casing the hole was drilled to TD with some minor shale caving problems.

The Late Cretaceous consisted primarily of interbedded tight micritic limestone and shale. No reservoir beds were present and no significant shows were recorded. However, traces of dead oil were noted between 2722 m and 2743 m (Ekofisk Formation). The Danian section consisted of detrital and skeletal limestone. No reservoir beds were noted and no shows recorded. The Paleocene contained 235 m of potential sandstone reservoirs. The sands were water wet and no significant shows were recorded. However traces of dead oil was again noted in an upper massive sand and in silty shales (Lista Formation) from 2457 m to 2472 m and from 2527 m to 2594 m. The Eocene section contained a good sand reservoir (Frigg Formation) from 1997 m to 2067 m. The formation was gas-filled down to 2048 m. The sand is white, medium to coarse grained, fine to very fine grained, medium sorted, unconsolidated, friable, sub angular grains, slightly micaceous with streaks of argillaceous very fine-grained silty sand. Good gas shows were present. The Oligocene section consisted of unconsolidated sand, siltstones and clays. The upper portion contained good shallow reservoir sand. No shows were recorded. Two conventional cores were cut from the interval 2023 m to 2027 m in the Frigg Formation. No wire line samples were taken.

The well was permanently abandoned as gas discovery on 28 March 1974.

TESTING

Production test between 2023 m and 2026 m produced an average of 442000 Sm3 gas per day on a 43/64" choke.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 30/10-2