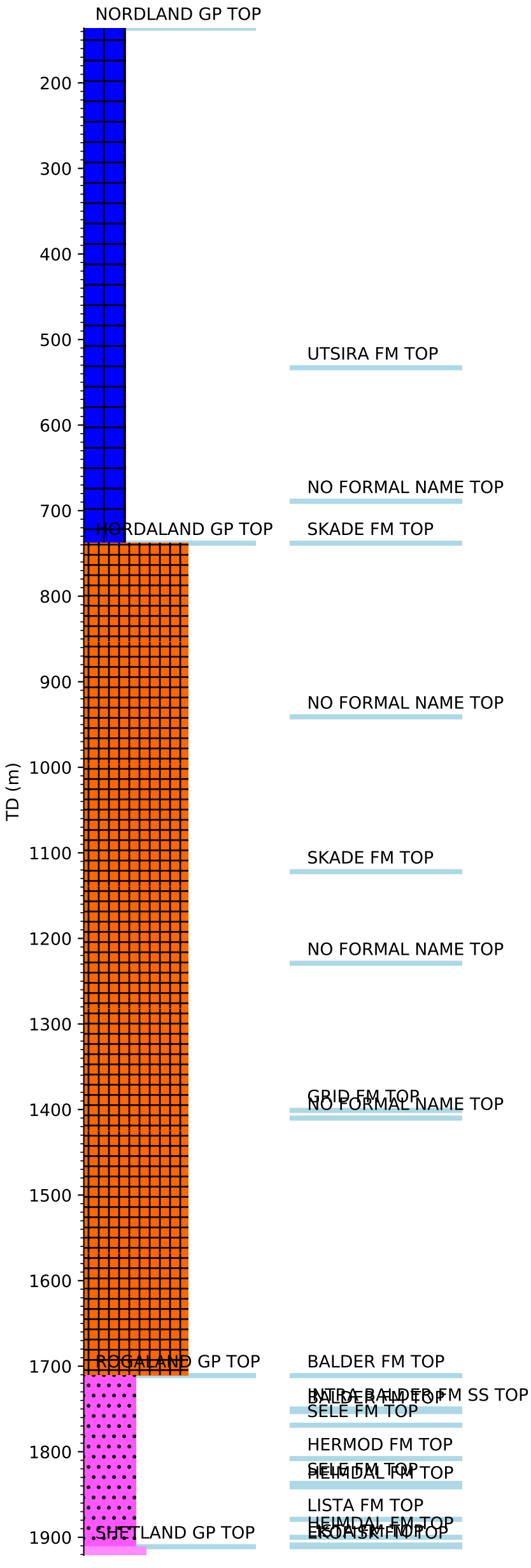

Wellbore History

GENERAL

Well 25/10-3 is located in the western part of the Balder Field complex on the Utsira High in the North Sea. Lower Eocene oil sands had been encountered in Esso wells 25/10-1, 25/11-1 and 25/8-1. The objective of 25/10-3 was to test the Eocene sand in a lower structural position to accurately establish the oil/water contact in the area; to determine their lateral continuity and if they would thicken towards the northwest.

OPERATIONS AND RESULTS

Well 25/10-3 was spudded with the vessel Glomar Grand Isle on 27 August 1970 and drilled to TD at 1921 m in the Early Paleocene Ekofisk Formation. Except for stuck pipe at 1247 m, which was worked free with Diesel oil and pipe lax in 4 hours, drilling operations were routine and trouble-free. The well was drilled with seawater/gel down to 402 m, with seawater Spersene/XP-20/Salinex mud from 402 m to 951 m, and with fresh water/Spersene/XP-20 mud from 951 m to TD.

The Oligocene to Recent sediments consisted of clays and sands with no indications of hydrocarbons. The 518 m thick Eocene section was chiefly grey to grey green clay shales with 6.7 m of wet sand in the interval 1401 m to 1413 m (Grid Formation), a 4 m oil-bearing sand from 1750 to 1754 m (Intra Balder Formation sandstone), and a 1 m wet sand at 1799 m. The 4 m oil sand had 32-36% porosity and tested 26 deg API gravity oil on a wire line formation test. Oil shows were observed in cuttings from 1716 m and down to the top of the oil bearing sand, and shows continued down to 1768 m, all through the cored section. In addition to the Intra Balder Formation sandstone the Paleocene section penetrated was composed primarily of 3 sands interbedded with grey green shale. From top to bottom the Paleocene sands were respectively 29 m thick with 35% porosity, 38 m thick with 35% porosity, and 9 m thick with 30% porosity. These sands were water-bearing.

The OWC was concluded to be somewhere between 1754 m and 1799 m. It was also concluded that the thin Lower Eocene sands did not correlate between wells and appeared to be lenticular and discontinuous.

One core was cut in the Balder Formation from 1752.6 m to 1768.1 m with 100% recovery. Formation Interval Tests (FIT) were conducted at 1750.8 m and at 1752 m. The first, at 1752.8 m, was a seal failure. The second recovered 0.052 Sm3 gas, 0.9 l oil, and 2.3 l gas and oil cut mud.

The well was permanently abandoned on 13 September 1970 as an oil appraisal well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 25/10-3