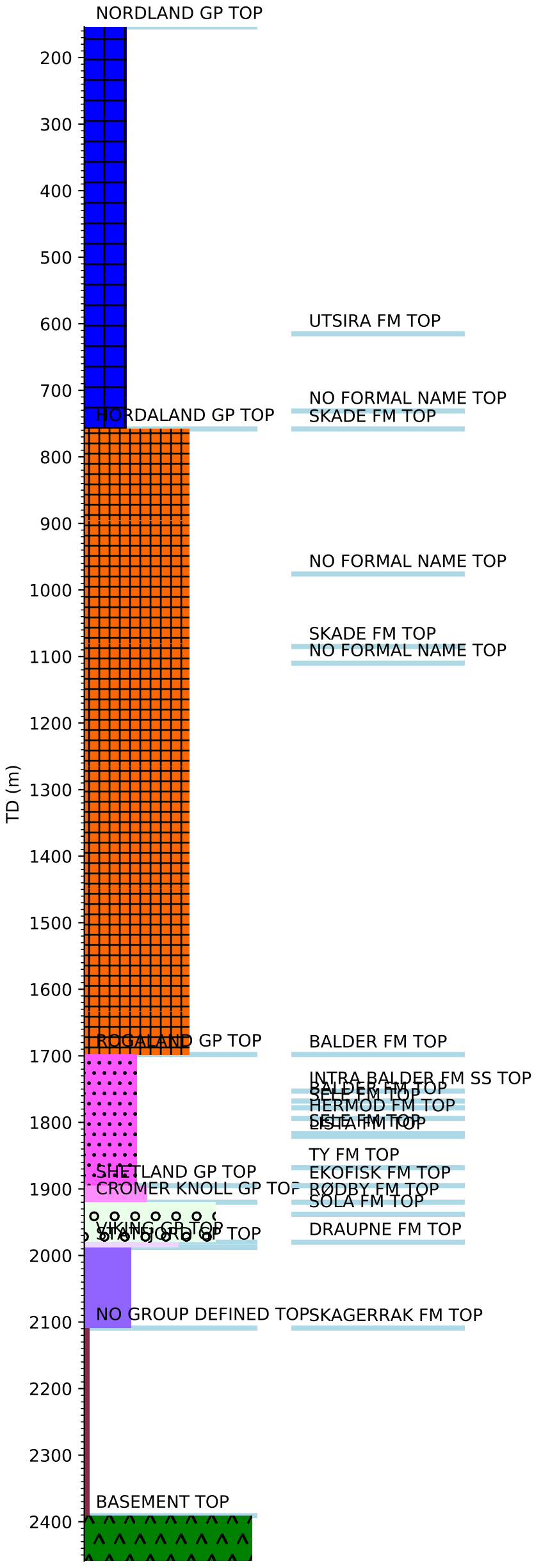
Groups

Formation Tops



Wellbore History

GENERAL

Well 25/11-1 is located on the Utsira High in the Northern North Sea. The objective of the well was to test the hydrocarbon potential of the sedimentary section; to investigate the lithology and sequence in this portion of the North Sea basin; and to partially fulfil Esso's drilling obligation to the Norwegian Government incurred on behalf of the Licenses.

OPERATIONS AND RESULTS

Wildcat well 25/11-1 was spudded with the semi-submersible installation Ocean Traveler on and drilled to TD at 2459 m in Basement rock. Actual drilling problems with the 25/11-1 were few. However, other major problems occurred. The number 2 column of Ocean Traveler was bumped by a supply boat on 6 November and began taking water. On 18 November, 1966 the rig was towed to Stavanger for repairs. By 14 April, 1967 the rig was able to continue drilling at the 25/11-1 location. Bad weather caused a new break in the drilling operations from 17 April to 10 May.

From the sea floor to 370 m (1213'), the hole was drilled with sea water and gel. Returns in this interval were to the sea floor. Below 370 m to total depth a sea water slurry with Bentonite, Zeogel, Spersene, XP-20, Caustic Soda and 0 -12% diesel oil was used.

First show in the well was reported in thin siltstone and sandstone bands at ca1690 m. Gas and live oil were found in Paleocene clastic sediments (Balder Formation; top has been set at 1698). The recovered cores from this interval (1726.7 to 1745.9 m) showed a predominantly shale section containing interbedded tuffaceous siltstone and sandstone. The shale bled gas throughout and developed a film of oil along fractured surfaces. The siltstone, though tight, bled oil at the base of most beds. The sandstone, whether 1/2 inch or three feet thick, was saturated with live oil which gave a yellow fluorescence and a streaming yellow-white or blue-white cut. Two FIT tests at 1755 and 1777 m yielded oil and gas, while a FIT at 1801.4 m recovered salt water and mud. An OWC was set at 1783 m. In this early phase of exploration in the North Sea, this was encouraging. The prospective reservoir rocks, however, were too thin to justify further tests in this well.

Fourteen cores were cut in the well. Core 1 was cut from 991.2 to 1000.3 m in the Hordaland Group; core no 2 from 1097.2 to 1104.9 m gave no recovery; core 3 was cut from 1104.9 to 1109.4 m in the Skade Formation, cores 4, 5, and 6 from 1726.7 to 1745.9 m in the Balder Formation; cores 7 and 8 from 1876.9 to 1904.0 m in the Ty and Ekofisk Formations; core 9 from 1956.8 to 1960.6 m in the Sola Formation, core 10 from 2013.5 to 2022.6 m in the Statfjord Formation; cores 11 and 12 in the interval 2186.9 to 2363.0 m in the Skagerrak Formation; and cores 13 and 14 in the interval 2391.1 to 2459.4 m in Basement rocks. Fifteen Formation Interval Tests (FIT) were attempted. The test at 1755 m recovered 323 litre gas and 6 litre of 22.3 deg API oil, while the one at 1777 recovered 535 litre gas and 7 litre of 20.2 deg API oil. Tests at 1801, 4 m, 1873.3 m, 2007.4 m, and 2196.4 m all yielded salt water. Nine tests between 1713 - 1876 m failed.

The well was permanently abandoned on 9 July 1967 as an oil discovery, the first in Norway.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 25/11-1