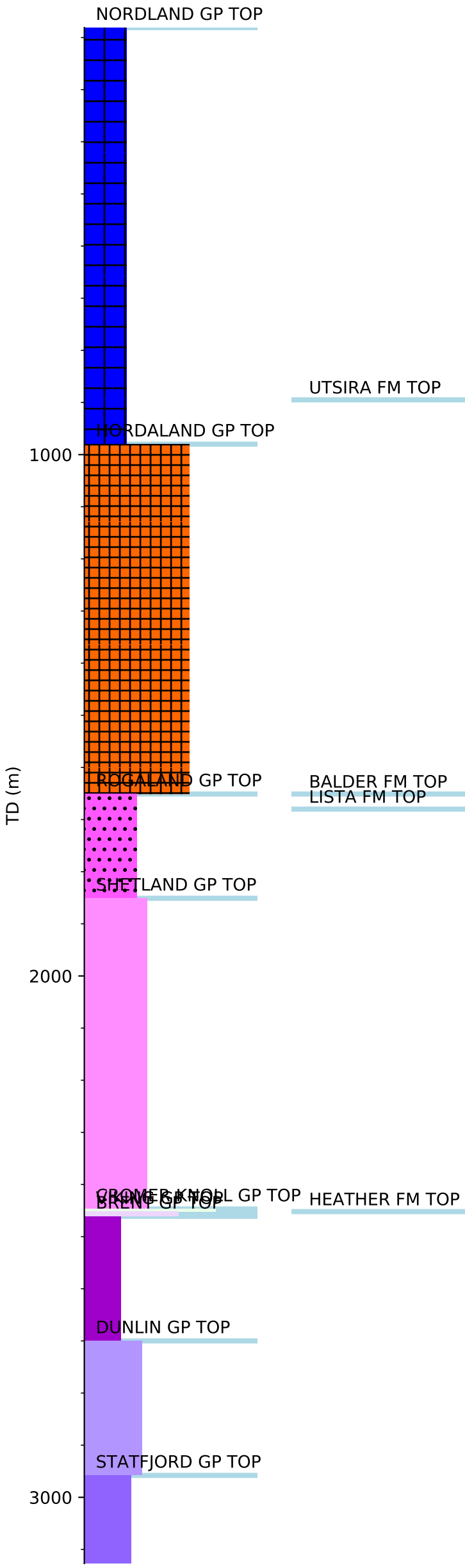
Groups

Formation Tops



Wellbore History

GENERAL

Well 33/9-7, was drilled on the 33/9-Alpha prospect, 2.5 km east of the Statfjord Field in the Tampen Spur area in the northern North Sea. The primary objective was to test a part of the Brent-Statfjord trend separated from the Statfjord Field to the west by a structural saddle. The primary target was the Brent Group sandstones. Sandstones within the Statfjord Group was a secondary target.

OPERATIONS AND RESULTS

Wildcat well 33/9-7 was spudded with the semi-submersible installation Dyvi Alpha on 11 September 1976 and drilled to TD at 3127 m in the Statfjord Group.

Good oil and gas shows seen in a 50-meter thick sequence of interbedded sands and claystones in the lower portion of the Paleocene from 1770-1820 m. The sands although not apparently continuous, were oil stained and had good gas shows throughout the interval. Log evaluation was not practical due to washing out resulting in excessive hole sizes. The Brent Group sandstones came in sandstones at 2461 m. There was 160 m net sand with average 27% porosity. The sands were oil-filled down to a section of claystones, coals and minor sands at 2520 m. An OWC was inferred at 2533 m. No shows were observed in the Statfjord sands, but the logs indicated scattered residual oil.

A total of 103.33 m core (86% recovery) was cut in nine cores in the interval 2465 to 2597 m in the Brent Group. No fluid samples were taken on wire line.

The well was permanently abandoned on 7 November 1976 as an oil discovery.

TESTING

Three drill stem tests were carried out.

DST 1 tested the interval 2489.9 m in the Brent Group. This test flowed 1080 m3 oil/day through a 3/4" choke. The GOR was 93 Sm3/Sm3, the oil gravity was 37.7 °API and the gas gravity was 0.69 (air = 1).

DST 2 and 3 both tested the interval 1780 to 1800 m in the Lista Formation. In DST 2, perforations were plugged and no fluid was produced to the surface. In DST 3, the formation produced fluid at a rate of 114 m3/day through a 1/2" choke. The fluid consisted of 70% free water, 27% emulsion, 2% bottom sediments, and 1% oil. The high water cut in this test could be a result of poor isolation of the zone due to excessively caved hole.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 33/9-7