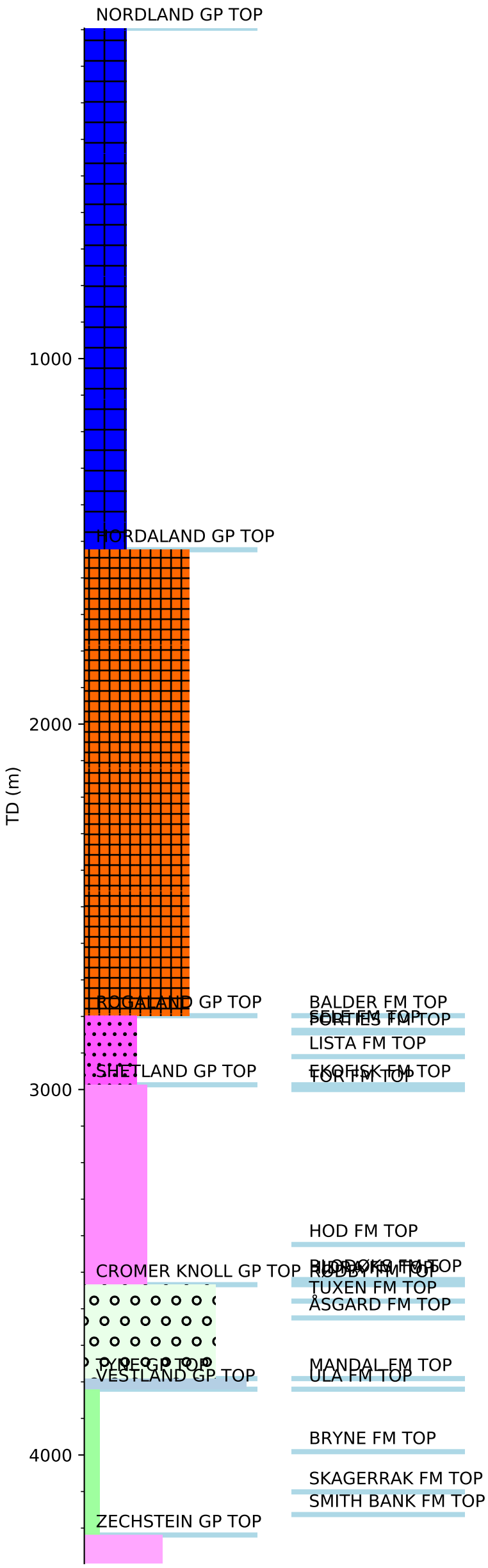
Groups

Formation Tops



Wellbore History

GENERAL

Well 2/1-3 was drilled on the Cod Terrace on the margin between the southern Vestland Arch and the Central Trough in the North Sea. The primary objective of the well was to test Late Jurassic sandstone within a fault sealed dip closure, against the downthrown side of a westerly heading fault complex at the base of the Cretaceous. Triassic sandstone was a secondary objective.

OPERATIONS AND RESULTS

Wildcat well 2/1-3 was spudded with the semi-submersible installation SEDCO H on 3 November 1979 and drilled to TD at 4297 in the Late Permian Zechstein Group. The well was drilled with Seawater down to 625 m and with Lignosulphonate mud from 625 m to TD.

Top of the Tyne Group, Mandal Formation, was encountered at 3791 m, with the Late Jurassic sandstone at 3819.5 m. The Late Jurassic sandstone reservoir was oil-bearing all through. The reservoir is a 59.5 m thick homogeneous fine to medium grained sandstone with a porosity from 15% to 22%. The sandstone grades into a well cemented argillaceous siltstone below. No oil/water contact was established. Oil shows were recorded in Tor Formation limestone at 3000 - 3005 m, throughout the Late Jurassic reservoir sandstone, and in Middle Jurassic Bryne Formation sandstone at 4020 to 4040 m.

Four cores were cut from 3823.0 to 3893.5 m in the Ula Formation reservoir sandstones.

The well was permanently abandoned on 29 March 1980 as an oil discovery.

TESTING

Three drill stem tests were performed in the Late Jurassic sandstones.

DST 1A perforated the interval 3863 to 3872.1 m and produced 226 Sm3 oil and 18689 Sm3 gas per day through a 40/64" choke. The GOR was reported to be 150 Sm3/Sm3 and the oil gravity was 41 deg API. The maximum bottom hole temperature recorded in the test was 151.1 deg C.

DST 2 perforated the interval 3838.5 to 3844.6 m and produced 1051 Sm3 oil and 54991 Sm3 gas per day through a 32/64" choke. The GOR was reported to be 116 Sm3/Sm3 and the oil gravity was 39 deg API. The maximum bottom hole temperature recorded in the test was 150.0 deg C.

DST 3 perforated the interval 3819.0 to 3825.1 m and produced 933 Sm3 oil and 39077 Sm3 gas per day through a 32/64" choke. The GOR was reported to be 108 Sm3/Sm3 and the oil gravity was 38 deg API. The maximum bottom hole temperature recorded in the test was 150.8 deg C.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 2/1-3