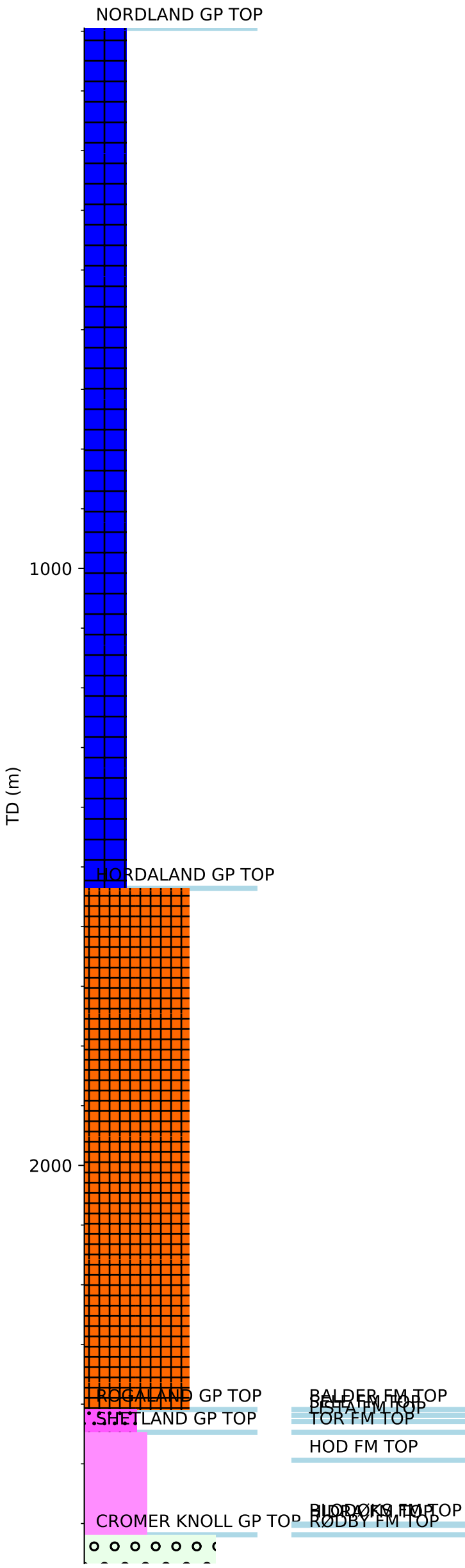
Groups

Formation Tops



Wellbore History

GENERAL

Well 2/8-8 was drilled to appraise the Valhall discovery in the southern North Sea. The well is reference well for the Hod Formation.

OPERATIONS AND RESULTS

Appraisal well 2/8-8 was spudded with the semi-submersible installation Deepsea Saga on 10 November 1975 and drilled to TD at 2667 m in the Early Cretaceous Rødby Formation. While running the 13 3/8-inch casing, returns (125 barrels) were lost while pumping plug. While cementing the 9 5/8-inch casing, the cement slurry was not properly displaced, and the casing was cemented back on the inside to 1022 m. Three days were lost due to this in drilling out the cement. Otherwise the well was drilled without significant problems. The well was drilled with sea water and hi-vis mud down to 169 m, with sea water/gel mud from 169 m to 402 m, and with lignosulphonate/gypsum mud from 402 m to TD.

Oil shows were recorded at several levels above the chalk reservoir: 1320 - 1329 m had fair shows on siltstones; 1390 to 1426 m had poor shows in shales and limestone; 1512 to 1676 m had oil staining with fluorescence and cut in shales; and 2050 to 2400 m had poor to fair shows in thin stringers of limestone and dolomite. Top of the chalk reservoir, Tor Formation, was encountered at 2447. It was oil bearing and had shows down to 2591 m. No shows were recorded below 2591 m.

At total of 47.7 m core was recovered in 14 cores from 2450 to 2600.9 m. The overall recovery was 39 %. No wire line fluid samples were taken.

The well was permanently abandoned on 15 March 1978 as an oil appraisal well.

TESTING

Tests were conducted over five intervals. Sand-water hydraulic fracture treatments were conducted on Tests 2, 3 and 4.

Test 1 tested the interval 2585 to 2595 m towards the base of the Hod Formation. The well was opened for flow during 34.6 hrs. 3.8 m3 cushion water and unmeasured oil and gas were produced to surface while 8 m3 oil cut water was reversed out of the test string.

Test 2 tested the interval 2556 to 2567.9 m in the Hod Formation. The test produced 455 Sm3 oil /day through a 48/64" choke. The GOR was 123 Sm3/Sm3.

Test 3 tested the interval 2507 to 2514.9 m in the Hod Formation. The test produced on average180 Sm3 oil /day. The GOR was 139 Sm3/Sm3 and the oil gravity was 38.1 deg API. The test also produced solids, plugging the chokes and causing unstable flow.

Test 4 tested the interval 2488 to 2492.7 m in the lower Tor Formation. The test produced 745 Sm3 oil /day through a 32/64" choke. The GOR was 218 Sm3/Sm3.

Test 5 tested the interval 2460 to 2464.6 m in the Tor Formation. The test produced 1222 Sm3 oil /day with open choke. The GOR was 199 Sm3/Sm3 and the oil gravity was 35.2 deg API.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 2/8-8