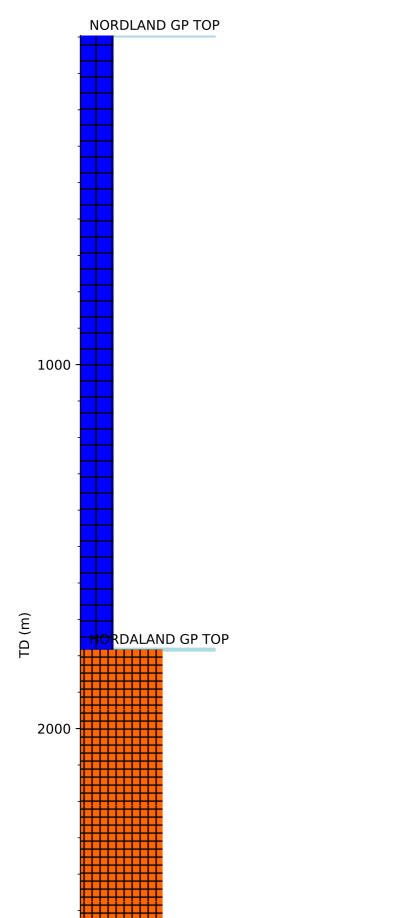


Wellbore History



GP TOP

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GENERAL

Well 2/7-14 was drilled to delineate the southern limits of the Ekofisk Field in the southern Norwegian North Sea. The primary target was the Danian limestone. It was anticipated that the proposed location would have a similar structural position as development well 2/4-A-3 and a comparable amount of Danian net pay. The secondary target was the Late Cretaceous limestone, which was untested on the southern nose of the Ekofisk Field.

OPERATIONS AND RESULTS

Appraisal well 2/7-14 was spudded with the semi-submersible installation Haakon Magnus on 9 August 1979 and drilled to TD at 3390 m in Late Cretaceous limestone. The well was drilled with Bentonite/Flosal spud mud to 20" casing point at 609 m, with Seawater/Native solids mud from 609 m to 13 3/8" casing point at 1526 m, with Drispac/ Lignosulphonate dispersed, inhibitive mud from 1526 m to 9 5/8" casing point at 3068 m, and with Bentonite/ Lignite/Drispac low fluid loss mud from 3068 m to TD.

Top Paleocene was encountered at 3045 m. Top of the Danian Limestone was penetrated at 3146 m, 15 m low to prognosis, with 52 m of Danian net pay, compared to 86 m Danian net pay in well 2/4-A-3. The Danian reservoir pressures were found to be less than virgin Ekofisk pressures, evidence that the interval had been drained by the nearby well 2/4-A-3. The Late Cretaceous was encountered at 3257 m, 13 m low to prognosis. The section flowed oil with a large volume of associated water in DST 2.

A total of 119 m core was recovered in 13 cores from the Paleocene and Late Cretaceous in the interval 3123 - 3306 m. No fluid sample was taken on wire line.

The well was suspended on 20 January 1980 as an oil appraisal.

TESTING

Five drill stem tests were made through perforations in the 7" liner.

DST 1 at 3346.7 - 3349.8 m in the Late Cretaceous Limestone recovered 12 m3 water cushion plus 21 m3 formation fluid (85% water, 15% oil and water emulsion).

DST 2 at 3261.4 - 3279.7 m in the Late Cretaceous Limestone produced in the final flow 227 Sm3 oil and 31430 Sm3 gas and 1445 m3 water /day on a 25.4 mm choke. The GOR was 139 Sm3/Sm3, the oil gravity was 30.4 deg API, and the gas gravity was 0.82.

DST 3 at 3225.7 - 3235.2 m in the lower Danian Limestone produced in the final flow 586516 Sm3 gas and 401 Sm3 water /day on a 20.6 mm choke.

DST 4 at 3189.5 - 3211.4 m in the middle Danian Limestone produced in the final flow 553 Sm3 oil and 86366 Sm3 gas with less than 1% water /day on a 15.1 mm choke. The GOR was reported to be 239 Sm3/Sm3, the oil gravity was 34.6 deg API, and the gas gravity was 0.682.

DST 5 at 3150.5 - 3168.7 m in the upper Danian Limestone produced in the final flow 76 Sm3 oil and 14368 Sm3 gas with 5% sediment and water /day on a 7.9 mm choke. The GOR was 190 Sm3/Sm3, the oil gravity was 32.9 deg API, and the gas gravity was 0.697.