



Wellbore History

GENERAL

Well 30/3-7 S was planned to drill the B-Prospect of the Veslefrikk field, but found hydrocarbons in various small fault segments on the edge of the Veslefrikk horst, and never reached the B-Prospect. Well 30/3-7 A, that was plugged back, was the first well to penetrate the Brent Group in the B-Prospect as a pilot hole for 30/3-7 B. Well 30/3-7 B was the first well to be drilled through the C-segment, and into the B-prospect west of the Main Veslefrikk Field.

The main objectives for well 30/3-7 B were to explore the sand potential and possible hydrocarbons in the C-segment, and in the B-prospect. The well would be utilized as a producer if sufficient amount of hydrocarbons were found. Because of total depth deeper than 4000 m TVD the well was classified as a HPHT well.

OPERATIONS AND RESULTS

Wildcat well 30/3-7 B was drilled from the fixed surface installation Veslefrikk A as a sidetrack from well 30/3-7 S higher up than 30/3-7A (2066 m TVD/2780 m MD versus 2397 m TVD/ 3336 m MD). It was kicked off on 20 May 1998. The well was drilled to 5970 m MD/4217 m TVD RKB in the Dunlin Group. The mud used, from kick-off to TD, was Interdrill, a pseudo-oil based mud system.

The base Cretaceous/top Viking Group was penetrated at 4259 m MD/3100 m TVD, 10 m shallow. Hydrocarbon filled Brent Group slump blocks (approximately 40 m reservoir sandstone) was encountered just below base Cretaceous at 4271.5 m MD/3107.7 m TVD. The lower 20 m is recognized as the Oseberg informal Formation B2A/B.

Two cores were cut (7 and 4 m) just above the main slump plane. They consisted of brittle Drake Formation shales that caused frequent jamming and very short cores. The slump plane was penetrated only 5 m shallower than prognosed.

The C-segment contains hydrocarbon filled Intra Dunlin Sand (IDS), which came in 32 m shallow. The reservoir quality in this location is poor. Three major faults have been observed between the C-segment and the B-prospect. The throws are approximately 400, 150 and 400 meters.

The fault block VF west 1 (produced in well 30/3-7S) was encountered close to prognosis, but the stratigraphy came in deeper, with unexpected 24 m TVD of sandy Ness Fm. The main fault to the B-prospect came in 80 m further to the west than prognosed, giving a total width of the VF west 1 block of 200 m. Two cores were cut from 4346 m to 4358.5 m in the L-prospect, just above the main slump plane. One oriented core was cut from 5715 m to 5740 m in the Oseberg Informal Formation in the B-prospect. Two MDT runs were made in the interval 4290 m to 5917 m, for pressure points and fluid sampling. Fluid samples were taken at 4290.5 m (mud filtrate and gas), 4674.9 m, and 5902.8 m.

The well was completed on 4 August 1998 as an oil/gas discovery. In January 1999 it was perforated over the intervals 5139 -5145 and 5163 - 5179 m MD and reclassified to production test well 30/3-T-7 B.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 30/3-7 B