



Wellbore History

GENERAL

Well 33/9-5 was drilled on the northern part of the Statfjord structure on Tampen Spur in the northern North Sea. The objective was to appraise the northern extension of the Statfjord Field with the Brent Group as primary target. The Brent Group had previously proved oil bearing in wells 33/9-3 and 33/9-4 on the northern part of the structure. The well was positioned to penetrate the upper Brent reservoir at 2522 m MSL, 62 meters above the known field water level. The Statfjord Group was a secondary objective.

OPERATIONS AND RESULTS

Appraisal well 33/9-5 was spudded with the semi-submersible installation Ross Rig on 27 October 1975 and drilled to TD at 3157 m in Late Triassic sediments of the Statfjord Group.

Top Brent Group (Tarbert Formation) was encountered at 2605 m, 57.8 m low to prognosis. As with other Brent Group oil wells in the Statfjord Field, high total gas readings (70 000 ppm) were encountered when the reservoir was penetrated. Using the field pay cut off value of 65% water saturation, the oil/water contact depth as measured from the CPI log is 2616.4 m (2591.4 MSL), which is 7.3 meters deeper than the main field water level. The resulting gross pay interval is 11.6 meters of which 100% is net pay using CPI field cut off values of 65% water saturation, 40% v-clay or 12% porosity. Average CPI measured porosity in the pay section is 22.1% and water saturation is 37%.

The Statfjord Group was penetrated at 2998 m and was found water wet.

One core was cut from 2611.5 to 2628.35 m with 88.7% recovery. The core to log depth shift was estimated to be -2.3 m. FIT fluid samples were taken at 2624.5 m (failed test), 2617.0 m (water with trace oil), 2611.0 m (water with trace mud), 2609.0 m (water with trace mud), 2607.0 m (35.8 °API oil and water), 2650.0 m (water with trace mud), and 2607.8 m (water only).

The well was permanently abandoned on 1 January 1976 as a dry well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 33/9-5