



Wellbore History

GENERAL

Well 34/10-6 was drilled on the northern part of the Delta structure in block 34/10 in the northern North Sea. It was the fifth well drilled on the structure. All four foregoing wells had tested oil in the Brent Group. The primary objective was to test Middle Jurassic Brent Group. Secondary objectives were sandstones of Early Jurassic age.

OPERATIONS AND RESULTS

Appraisal well 34/10-6 was spudded with the semi-submersible installation Borgny Dolphin on 13 November 1979 and drilled to TD at 2362 m. A total of 14.6% of the rig time was lost due to waiting on weather. The other main causes of downtime was technical failure during cementing of the 9 5/8" casing, followed by two squeeze jobs, repair of subsea equipment and lost circulation. The lost circulation was experienced on several occasions when drilling the 8 1/2" hole. The main reason for this was that the 9 5/8" casing (and 13 3/8" casing) were set too high, causing low formation integrity at the casing shoes. The well was drilled with spud mud down to 308 m and with seawater/polymer from 308 m to TD.

The Brent Group sandstones were encountered at 2075 m, about 100 m below the OWC established in the previous wells drilled on the Delta structure. The Brent Group was 215 m thick with 145 m net of good reservoir sands (average porosity = 27.8 %). The Brent Group was water bearing. Oil shows were seen from 1580 m to 1632 m in the Balder Formation, and from 1710 m to 1812 m in the Lista Formation and top Shetland Group, otherwise no evidence of hydrocarbons was seen in the well.

No conventional cores were cut. The RFT tool was run for pressure points, but no wire line fluid samples were taken.

The well was permanently abandoned on 22 January 1980 as a dry well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 34/10-6