



Wellbore History

GENERAL

Well 33/9-6 was drilled ca 3 km east of the UK border on the 9-Delta prospect located on the regional Murchison structural trend, which extends across the northern portion of block 33/9. The well was the first wildcat in the Norwegian sector of the Murchison trend. The primary objective was the Brent Group sand, which is oil reservoir of the adjacent Murchison Field. The well was drilled near the crest of the structure with a planned total depth of 3300 m, approximately 30 m into the Early Jurassic Statfjord Formation.

OPERATIONS AND RESULTS

Wildcat well 33/9-6 was spudded with the semi-submersible installation Dyvi Alpha on 23 June 1976 and drilled to TD at 3354 m in the Early Jurassic Statfjord Formation.

The Tertiary consisted primarily of clays, siltstones, and minor sands. The tuffaceous red claystone typical of the Paleocene was encountered slightly above the log pick at 1669.5 m. The sandy basal portion of the Paleocene was not well developed in 33/9-6. Oil and gas shows have occurred in this zone in both Statfjord and Murchison Field wells; however, no-shows were observed in 33/9-6. The objective Brent Group was encountered at 2995 m, 7.5 m low to prognosis. The sand was described as clear to white, fine grained and very micaceous. Porosity was poor to fair; and poor to fair oil shows and scattered thin zones of bleeding oil were described down to 3023 m. No shows occurred below 3023 m. Schlumberger Coriband Log analysis and core data indicated 24.5 meters of gross pay and 13.5 meters of net pay, and an oil/water contact of 3019.5 m. Based on this reserves for the horst block alone were estimated at only ca 900000 Sm3 oil due to the poor reservoir quality in the oil column. By assuming the same oil/water contact for the graben area to the east additional reserves of ca 7900000 Sm3 oil was estimated.

Two cores were cut in the Brent Group reservoir from 2997 m to 3033.4 m. Four FIT'S were run at 2998.5 m, 2996.5 m, 2997.5 m, and 2995.5 m in the Brent reservoir to evaluate the shows. The FIT's were unsuccessful in recovering quantitative formation fluid. With the exception of FIT No. 2, which recovered a trace of oil, only mud filtrate, mud, and a trace of gas were recovered. The NaCl content of recovered fluid ranged from 3300 - 5280 ppm which was consistent with the salinity of the drilling mud.

The well was permanently abandoned on 31 August 1976. It is classified as a minor oil discovery.

TESTING

A drill stem test was attempted, but terminated without results due to mechanical problems.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 33/9-6