

Wellbore History

GENERAL

Well 30/9-7 was drilled on the B-prospect in the Oseberg South area. The prospect is an easterly tilted fault block, separated from the Omega structure by a NNW-SSE trending normal fault. The objective was to prove oil in the Brent Group sandstones and define an oil/water contact.

OPERATIONS AND RESULTS

Wildcat well 30/9-7 was spudded with the semi-submersible installation Polar Pioneer on 2 November 1988 and drilled to TD at 3565 m in the Early Jurassic Nansen Formation. No significant problem was encountered in the operations. The well was drilled with spud mud down to 1072 m and KCl/polymer mud from 1072 m to TD.

Well 30/9-7 encountered oil in the Brent Group, Tarbert Formation. No additional hydrocarbon bearing intervals were found. The Tarbert Formation (2810 - 2903 m) was oil bearing down to 2827 m (OWC from RFT). The net pay was estimated to be 13.6 m and average water saturation calculated to 37.9%. Average porosity was 21.2%. RFT results showed no pressure communication with well 30/9-4 in the Omega structure within the Tarbert Formation. Some oil shows were described in thin sandstone stringers at the base of the Våle Formation and down into limestones in the uppermost Shetland Group (2375 m to 2382 m). Below OWC in the Tarbert Formation, sandstones had no to weak petroleum odour and cut fluorescence down to 2880 m and brown dead oil stain and weak cut fluorescence down to 2885 m.

Two cores were cut in the Tarbert Formation from 2832 m to 2888 m. RFT fluid samples were taken at 2818.2 m (oil, water and filtrate) and at 2828.6 m (water and filtrate).

The well was suspended on 23 December 1988. It was permanently plugged and abandoned on 7 August 2003. It is classified as an oil discovery.

TESTING

One production test was performed in the interval 2811.0 - 2822.0 m in the Tarbert Formation. The test produced on average 540 Sm3 oil and 75600 Sm3 gas /day on a 12.7 mm choke. The GOR was 140 Sm3/Sm3, the oil density was 0.849 g/cc and the gas gravity 0.693 (air-1). The bottom hole temperature measured at 2759.7 m was 108.0 °C. The well produced 1% CO2 and no H2S.