

Wellbore History

GENERAL

Well 30/6-8 was drilled on the Epsilon structure between the Oseberg and Brage discoveries. At the well location seismic mapping indicated structural closure at Brent Group level and below. The primary objectives were to find hydrocarbon accumulations within the Brent Group and the overlying clastic wedge of Bathonian-Callovian age. Other Jurassic sandstones were also considered as prospective targets. The well was planned to reach ca 3500 m total depth, 75m into the Statfjord Group.

OPERATIONS AND RESULTS

Wildcat well 30/6-8 was spudded with the semi-submersible installation Treasure Seeker on 15 June 1982 and drilled to TD at 3600 m in the Early Jurassic Statfjord Formation. A 17 1/2" pilot hole was drilled from 232 m to 950 m. No shallow gas was reported. No serious problems occurred while drilling. The well was drilled with seawater and hi-vis pills down to 232 m, with seawater/hi-vis pills and Drispac from 232 m to 955 m, and with KCl/polymer mud from 955 m to TD.

No hydrocarbon bearing sandstone intervals were encountered in this well. The only hydrocarbon indications were fluorescence and cut fluorescence in sandstone cuttings at 3560 to 3563 m in the Statfjord Group and trace fluorescence, no cut, in sidewall cores at 3147 and 3154 m in the Etive Formation. The well penetrated an Intra Heather Formation Sandstone interval (2445.5 - 2523.5 m) with 10.6 m net with average porosity of 15.7 %. A Callovian wedge (2712.5 - 3024 m) was encountered by the well, but no clastic sediments with reservoir properties were found within the wedge. A total of 147 m of Brent Group (3024 - 3171 m) sediments were encountered. Net sand was 45.9 m with an average porosity of 16.1 %. Net sand within the Cook Formation (3349.5 - 3404.5 m) was 2.8 m with average porosity of 15.8 %. The well stopped 73 m into the Statfjord Formation (3532 -3600 m) of which 21.3 m was sand with an average porosity of 10.6 %.

The pressure regimes of the four different water saturated reservoirs were calculated from RFT-measurements. The "Intra Heather Sand" shows a normal pressure of approx. 1.03 rd. The Brent, Cook and Statfjord sand intervals have overpressures of respectively 1.08 rd, 1.15 rd and 1.16 rd.

Four cores were cut. Core 1 was cut in the Late Jurassic Heather Formation from 2768.0 to 2786.0 m. Cores 2 and 3 were cut from 3033 to 3069.1 m in the Tarbert and Ness formations. Core 4 was cut from 3156 to 3169.9 m in the Etive Formation. No wire line fluid samples were taken.

The well was permanently abandoned on 6 August 1982 as a dry well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 30/6-8