



Wellbore History

GENERAL

Well 31/4-11 was drilled on the Bowmore structure in the northern part of the Brage Field as a combined appraisal/exploration well. The Bowmore structure is situated about 6-8 km NNE of the Brage platform. It is a NE-SW trending wedge shaped horst, rising and tapering towards the SW. The primary objective was to prove hydrocarbons in the Middle - Late Jurassic Fensfjord Formation. The secondary objectives were to prove hydrocarbons in sandstones of the Late Jurassic Sognefjord and Draupne formations and in the Middle Jurassic Brent Group. During drilling of the well, it was decided to extend the well and explore the hydrocarbon potential in the Statfjord Formation.

OPERATIONS AND RESULTS

Wildcat well 31/4-11 was spudded with the semi-submersible installation Scarabeo 6 on 27 July 2000 and drilled to TD at 3271 m (2765 m TVD) in the Early Jurassic Statfjord Group. This is a deviated well. It was drilled vertical down to 1410 m and deviated from there with up to 58.7 deg inclination. The well was drilled with sea water and hi-vis pills down to 283 m and with Glydril mud from 283 m to TD.

Top Draupne Formation was encountered at 2130 m. Intra Draupne sandstones interbedded with claystones, shale and siltstone were penetrated from 2149 m to top Sognefjord Formation at 2201 m. The Draupne Formation sandstones were gas saturated while only water was sampled in the underlying Sognefjord Formation. However, geochemical analyses of cores indicated an oil column from 2189 m to 2217 m.

The Fensfjord Formation was penetrated from 2351 m to 2426 m. Moveable oil was proven with an ODT at 2376 m.

The Brent Group was encountered with top Tarbert Formation at 2644 m. Tarbert and Ness formations contained oil down to a shale sequence at 2682 m in the Ness Formation. Excellent pressure points indicated an OWC at exactly 2696 m.

Top Statfjord Group was encountered at 3178 m. The Statfjord Group was water bearing with weak shows at the top.

No oil shows were described above top Jurassic level.

A total of 16 cores were cut from 2123 m to 2431 m in claystones, siltstones and sandstones of the Draupne, Sognefjord, Heather and Fensfjord formations. Core recovery varied from 6.3% to 100%. Wire line fluid samples were taken in the Draupne and Sognefjord formations at 2162 m (gas), 2182.5 m (gas), and 2205.8 m (water); in the Fensfjord Formation at 2357.5 m (oil) and 2372.3 m (oil); and in the Brent Group at 2678.5 m (oil), 2675.1 m (oil), 2699.2 m (water), and 2712.8 m (water)

The well was permanently abandoned on 12 September as an oil and gas discovery.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 31/4-11