

## **Wellbore History**

## **GENERAL**

Well 30/8-1 S was drilled in the Viking Graben of the North Sea, just west of the Oseberg Fields. The objective was to test the hydrocarbon potential of the Jurassic Brent Group and Statfjord Formation. The well was committed to drill into the Hegre Group or to a maximum depth of 5026 m TVD.

## **OPERATIONS AND RESULTS**

Wildcat well 30/8-1 S was spudded with the semi-submersible installation Treasure Saga on 1 November 1994 and drilled to TD at 4688 m in the Early Jurassic Amundsen Formation. No shallow gas was observed in the well. A kick was taken at 4055 m, where 0.8 m3 was gained over a 30 minute interval on drilling and 1.8 m3 gained on flow checking before shutting in the well. The kick was circulated out through the choke manifold and the well was killed with heavy mud. When logging the 12 1/4" section the tools got stuck several times. On a short wiper trip to the 9 5/8" casing shoe a 2.5 m3 kick was taken when circulating and 1.67 m3 while flow checking. Again the well was killed with heavy mud. Frequent mud losses were experienced in the final 8 3/8" section from 4332 to TD. The well was drilled with spud mud down to 1360 m, with KCI/polymer mud from 1360 m to 4058 m, and with Ancoterm High Temperature water based mud from 4058 m to TD.

The main reservoir interval consisted of the Middle and Lower Tarbert Formations, but the Ness and the ORE Formations were also encountered. Hydrocarbons were encountered in the Tarbert Formation in a gas-down-to situation at 3687 m (3525.8 m TVD). Net sand is 109.9 m, with net pay of 84.7 m. An additional thin hydrocarbon-bearing zone is indicated in sandstones of the Ness Formation at 3884 - 3888 m. The formation pressure data indicate a clear Tarbert Gas gradient (rich gas), and a water gradient in the underlying interval. There is no pressure communication between the hydrocarbon bearing zone and the water zone in the well position. The pressure regime in the Brent Group was higher than anticipated. Weak oil shows were encountered in the Late Maastrichtian. Gas shows were encountered in the Heather Formation and in the Brent Group.

A total of 203 m core was recovered in 13 cores from the Heather, Tarbert, and Ness Formations. A wire line water sample was taken at 3734.9 m.

The well was suspended on 1 March 1995 due to environmental regulations. It is classified as a gas/condensate discovery. It was re-entered later same year to fulfil the drilling commitment and to test the Brent and possible Statfjord discoveries.

## **TESTING**

No drill stem test was performed.