

Wellbore History

GENERAL

Well 30/8-1 SR is a re-entry of well 30/8-1 S in the Viking Graben of the North Sea, just west of the Oseberg Fields. The objective of the original 30/8-1 S well was to test the hydrocarbon potential of the Jurassic Brent Group and Statfjord Formation with the additional commitment to drill into the Hegre Group or to a maximum depth of 5026 m TVD. Well 30/8-1 S discovered gas/condensate in the Tarbert Formation of the Brent Group, but was suspended on 1 March 1995 due to environmental regulations. The re-entry 30/8-1 SR should complete the programme for 30/8-1 S.

OPERATIONS AND RESULTS

Well 30/8-1 SR was re-entered and spudded with the semi-submersible installation on 14 November 1995 and drilled to TD at 5149 m (4767 m TVD) in the Statfjord Formation. Drilling activities took 9 days more than budget, due mainly to a wear-hole in the casing and fishing for lost logging tools. A core was attempted at core point 5145 m in the Statfjord Formation. After coring to 5149 m the core the BHA was pulled, but both core and barrel was lost in hole. Fishing was unsuccessful and 5149 m became final TD. The well was drilled water based with ANCO 2000 mud from 4668 m to 4710 m and with Ancoterm High Temperature mud from 4710 m to TD.

The Statfjord Formation was the only new formation penetrated by the re-entry. Based on logs and one core gas was identified in the Statfjord Formation down to 4859.0 m (4497 m TVD) (gas-down-to contact). Based on MDT-pressure data, the initial reservoir pressure was interpreted to be 778 Bar at 4696.6 m (4356 m TVD). In the Statfjord Formation a total of 98.0 m (true stratigraphical thickness) net gas pay was interpreted with an average log calculated porosity of 12.2% and an average water saturation of 42.5%. The core data showed an average of 0.26 mD for the horizontal permeability. This is however only for 9.5 meters of the total pay and is therefore not necessarily representative for the whole pay. Very weak oil shows (typical of gas reservoirs) were seen in the core. No significant oil shows were seen on the cuttings samples.

One core was taken at 4716 - 4725.5 m in the Statfjord Formation. A second core was attempted in the Statfjord Formation, but was lost in the hole. No wire line fluid samples were taken.

The well was temporarily abandoned on 1 March 1996 as an untested gas/condensate discovery in the Statfjord Formation. P&A operation of the wellbore was completed 1 December 2003 by Deepseas Delta.

TESTING

A production test was attempted in the interval 4700 - 4803 m in the Statfjord Formation. The testing operations were terminated 38.8 days behind budged without fulfilling the test objectives. The main contribution for the budged break was flash setting of the cement inside the 5" liner and twice pulling of the test string due to downhole tool failures (one collapsed seal stem and one wash out in the DST assembly).