

## **Wellbore History**

## **GENERAL**

Well 15/6-9 S was drilled on the Ermintrude prospect east of the Dagny discovery and north of the Sleipner Vest field. The prospect is located in the South Viking Graben on the northernmost extension of the Sleipner Terrace, with the Utsira High immediately to the east. The primary objective was to prove hydrocarbons in the Hugin Formation and to acquire data to understand the reservoir characteristics and fluid distribution, and how the Ermintrude structure is connected to the Dagny discovery. Potential targets in the Sleipner and Skagerrak Formation were also investigated by this drilling.

## **OPERATIONS AND RESULTS**

Well 15/6-9 S was spudded with the jack-up installation West Epsilon on 29 March 2007 and drilled to TD at 3940 m in the Late Triassic Skagerrak Formation. The well was drilled vertical down to 1050 m and continued in a slightly deviated S-shaped trajectory towards TD. The well was drilled with seawater and hi-vis sweeps down to 277 m, with seawater and CMC EHV sweeps from 277 to 762 m, with a KCl/glycol/polymer mud from 762 to 2797 m, and with low-sulphate KCl/glycol/polymer mud from 2797 m to TD. No shallow gas was observed while drilling the 36" hole, 12 1/4" pilot hole or in the 24" hole opening run. However, 6.3% gas (98% Methane) was observed at top Utsira Formation, 39 m below the 20" casing shoe. MDT pressures and sampling confirmed a normally pressured gas accumulation.

The well penetrated rocks of Quaternary, Tertiary, Cretaceous, Jurassic, and Triassic age. The well penetrated the Hugin reservoir at 3741 m, slightly shallower than prognosed. Pressure points and fluid samples were taken with the MDT and a hydrocarbon discovery was proven in the Hugin Formation. The MDT results and wire line logs proved this to be light oil in an oil-down-to situation at ca 3790 m (3714 m TVD MSL). There were no shows or other hydrocarbon indications below 3790 m.

One conventional core was cut at 3761.3 - 3811 m in the Hugin Formation. Shows on the core verified the oil-down-to contact at 3793 m. A total of 26 sidewall cores were drilled with the MSCT in Draupne, Heather, Hugin, Sleipner and Skagerrak Formation. High quality oil samples were acquired in the Hugin Formation at 3763 m and 3791 m. A water sample was taken at 3804 m in the Sleipner Formation. The quality of the water sample was low with 40% mud contamination measured at the rig site. In the Utsira Formation, gas samples were taken by dual packer MDT at 793 m.

Well 15/6-9 S was plugged back to 2838 m in the 8 1/2" section on 26 May 2007. The well is classified as a gas and oil appraisal well. The geologic sidetrack 15/6-9 A was kicked off on the same day to prove communication with the Dagny discovery and to appraise gas above the oil-leg in the Hugin Formation.

## **TESTING**

No drill stem test was performed.