

## **Wellbore History**

Well 15/9-22 is located just south of the Sleipner Vest field in the South Viking Graben of the North Sea. The primary objective of the well was to test the hydrocarbon potential of the Wishbone NE prospect, which was a stratigraphic pinch out trap. The key risks for the prospect were reservoir adequacy (Hugin Formation) and lateral seal. The primary reservoir target was the Upper Hugin Formation (Middle Jurassic Vestland Group), with Middle Jurassic Lower Hugin Formation, Sleipner Formation and Triassic as secondary targets. The anticipated hydrocarbon type was gas with condensate.

## **OPERATIONS AND RESULTS**

Well 15/9-22 was spudded with the semi-submersible installation Ocean Vanguard on 1 January 2006 and drilled to TD at 3915 m (3923 m logger?s depth), 167 m into the Triassic Skagerrak Formation. A 36" hole was drilled and 30" conductor was successfully run and cemented at 201 m. Due to the probability of shallow gas, a 26" hole was drilled to 508 m and a 20"x18 5/8" casing string set at 204 m. The BOP and riser were run and tested after considerable delays for repairs and waiting on weather. The 17 1/2" hole was drilled to 1531 m, and no shallow gas was seen. The 13 5/8" surface casing was run and became stuck at a depth of 953 m. The casing was cut and fished out of hole from 601 m and a kick-off plug set from 592 m to inside of the 18 5/8" casing at 410 m. The hole was sidetracked (15/9-22 T2) at 522 m on Jan 31 2006, and the new hole was drilled to TD without further significant problems. The well was drilled with seawater down to 508 m and with Glydril KCl mud from 508 m to TD.

The lithostratigraphic tops below 410 m, as given on this fact page, are from the sidetrack. The Hugin Formation was encountered at 3572 m. It was 141 m thick, of which 40 m had average porosity of 18.1%. From wire line interpretation possible residual hydrocarbon saturation was reported in the uppermost porosity intervals in the Hugin Formation, but otherwise the only hydrocarbon indication in the well was a strong hydrocarbon odour from a cuttings sample from 3408 m in the Draupne Formation. MDT pressures were taken. A dry hole case logging program was performed. No conventional cores or sidewall cores were taken.

The well was permanently abandoned on 13 March 2006 as a dry well.