



## Wellbore History

### GENERAL

Well 15/3-7 was drilled to appraise the Gudrun Discovery in the North Sea, on the east flank of the South Viking Graben and west of the Utsira High. The main objective was to improve the data quality related to formation pressure, fluid properties and other reservoir parameters in the Hugin Formation in the Middle Jurassic. The secondary objectives were to explore possible reservoir sands in the Late Jurassic and the hydrocarbon phase of any proven hydrocarbons.

### OPERATIONS AND RESULTS

Appraisal well 15/3-7 was spudded with the semi-submersible installation West Alpha on 26 April 2001 and drilled to TD at 4818 m, 211 meters into the Middle Jurassic Hugin Formation. The 8 1/2" hole was drilled in 21 bit runs, including 4 core runs. The main reason for all the bit runs was junk in hole causing 18 days NPT. The well was drilled with seawater and bentonite down to 945 m, with KCl/polymer/glycol from 945 m to 2740 m, and with oil based mud from 2740 m to TD. No shallow gas was observed.

The well penetrated several Tertiary sandstone sequences including a 373 m thick Heimdal-Ty sequence. The Draupne Formation was found to be 350 m thick and contained several intra-Draupne sandstone sequences interbedded with claystone and limestone. The claystones became darker and more organic rich with depth. A MDT sample from 4224 m in the upper part of the Draupne Formation proved light oil. The upper part of the Hugin Formation was found water bearing as confirmed by a water sample from the Hugin 1 sandstone at 4610 m. No pressure gradients could be obtained from the Hugin Formation. In the lower part of the Hugin Formation, no sample or pressure data could be obtained. However, sandstones were gas filled based on logs, with a likely GWC at 4787 m. Pressure gradients from the Draupne Formation indicate no communication between the oil- and water-bearing zones.

Four conventional cores were cut in the interval 4609 m to 4670 m in the Hugin Formation, with a total of 46.4 m core recovered.

The well was permanently abandoned on as a dry well.

### TESTING

No drill stem test was performed.

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 15/3-7