



## Wellbore History

### GENERAL

Well 16/2-9 S was drilled on the Aldous Major North prospect on the Utsira High in the North Sea. The prospect is separated from the Aldous Major South/Avaldsnes discovery by a North-East trending fault, but was considered as a possible extension of the Aldous Major South. The main objective of the well was to investigate the hydrocarbon potential, reservoir quality and lateral sand distribution in the Late Jurassic Viking Group. The secondary objective of well 16/2-9 S was to explore the hydrocarbon potential in the fractured granitic basement. The third objective of well 16/2-9 S was to investigate the hydrocarbon potential in the Cretaceous age Shetland Chalk Vindballen lead.

### OPERATIONS AND RESULTS

Wildcat well 16/2-9 S was spudded with the semi-submersible installation Transocean Leader on 21 August 2011 and drilled to TD at 2082 m (2070.6 m TVD) into Basement rocks. Neither shallow gas nor shallow water flow was observed, and operations went forth without significant problems. The well was drilled with sea water and hi-vis bentonite pills down to 343 m, with KCl/Polymer/GEM Spec 3 mud from 343 m to 1066 m, with Performadril WBM spec 6a mud from 1066 m to 1725 m, and with Low sulphate Performadril WBM mud from 1725 m to TD.

Top expected main reservoir, the Draupne Formation, was picked at 1933.5 m. The intra-Draupne reservoir was unusual and consisted of spiculites. It contained oil. The reservoir proved to be considerably thinner and with much poorer reservoir quality than expected and the oil water contact could not be established exactly. However, based on the saturation profile and results from fluid sampling, the OWC was set at 1941.5 m (1930.1 m TVD / 1906.6 m TVD MSL) with the Free Water Level a few meters further down. The secondary and third objectives, the fractured granitic basement and the Shetland chalk respectively, were dry. There were no oil shows observed in the well apart from in the hydrocarbon bearing reservoir section.

Three cores were taken in the Skagerrak Formation and into the basement at core depths 1952 - 1975.5 m, 1975.5 - 1987 m and 1987.1 - 1991.5 m. The core shifts relative to the logs were 1, 2, and 3 m respectively, for the three cored intervals. MDT wire line fluid samples were taken at 1935.17 m (oil), 1938.2 m (oil), 1941.0 m (water/oil), and at 1941.7 m (oil/water).

The well was permanently abandoned on 24 September 2011. It is classified as an oil appraisal to the Aldous Major South discovery.

### TESTING

No drill stem test was performed.

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 16/2-9 S