



## Wellbore History

### GENERAL

Well 15/3-9 was drilled on the Brynhild prospect situated on the east flank of the south Viking Graben, west of the Utsira High. The Brynhild Prospect was interpreted as the eastwards continuation of the Gudrun Field. The main objective of the 15/3-9 well was to prove economical hydrocarbon columns in the Late Jurassic SST1 and the Late Jurassic SST2 of the Draupne Formation. The Hugin Formation was a secondary objective.

### OPERATIONS AND RESULTS

Wildcat well 15/3-9 (Brynhild) was drilled with the semi-submersible installation Transocean Leader. A pilot hole 15/3-U6 was drilled to 918 m. No shallow gas was observed by the ROV at the wellhead or by the MWD while drilling the pilot hole. The main well was spudded 15 m off the pilot-hole location on 19 May 2010 and drilled to the Ty Formation where the pipe got stuck. It was not possible to get it loose. A technical sidetrack, 15/3-9 S T2 was decided. The sidetrack was kicked off from 2350 m and the well was drilled to TD at 4654 m in the Middle Jurassic Sleipner Formation without further significant problems. The well was drilled with Seawater and SW/PAC sweeps down to 1001 m, with Performadril WBM from 1001 m to 2724 m (primary well and sidetrack), and with XP-07 OBM from 2724 m to TD.

The Late Jurassic Draupne Formation was encountered at 3975 m with top Intra Draupne Formation SST1 sandstone at 4112 m. The SST1 was oil bearing down to an oil water contact was at 4132 m TVD. The prognosed SST2 sandstone was encountered at 4226 m and was entirely water filled. The Hugin Formation was encountered at 4475 m and contained both gas and oil, each fluid type with its own down-to contact. The Draupne SST1 had a net to gross ratio of 0.75, while the net to gross ratio in the Hugin Formation was 0.16. Except for the petroleum bearing SST1 and Hugin reservoirs no oil shows were reported from the well.

Two cores were cut in sidetrack 15/3-9 T2, Core 1 in the Draupne SST1 (23 m), and Core 2 in the upper part of the Hugin Formation (32.15 m). The cored section in the Draupne SST1 extends from 4124 to 4147 m MD, while the cored section in the Hugin Formation extends from 4482 to 4514.17 m MD. Core 1 and Core 2 are shifted against the log curves with +2.13 m and +2.89 m, respectively. MDT fluid sampling was performed. Oil samples were taken at 4115 m and 4128 m in the Intra Draupne Formation SST1 sandstone. In the Hugin Formation a gas/condensate sample was taken at 4580.7 and an oil samples was taken at 4510 m. MDT water samples were taken at 4182.5 m and at 4528.7 m in the Hugin Formation.

The well was permanently abandoned on 13 August 2010 as an oil and gas discovery.

### TESTING

No drill stem test was performed.

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 15/3-9