



## Wellbore History

### GENERAL

Well 3/7-9 S was drilled on the Musling prospect in the Søgne Basin ca 5 km north-west of the Trym Field in the North Sea. The primary objective of the Musling exploration well was to evaluate if the target sandstone reservoirs of the Sandnes and Bryne formations contain economically recoverable hydrocarbons.

### OPERATIONS AND RESULTS

Wildcat well 3/7-9 S was spudded with the jack-up installation Mærsk Giant on 14 March 2013 and drilled to TD at 3717 m (3678 m TVD) in Triassic sediments belonging to the Smith Bank Formation. Boulders were encountered in the top hole at various depths causing stuck string several times. A 12 1/4" shallow gas pilot hole was drilled from 184 m to 1117 m. While drilling the pilot hole unfavourable wind direction caused 8 days WOW. Otherwise, no significant problem was encountered in the operations. The well was drilled with seawater and sweeps down to 190 m, with water based bentonite/polymer mud from 190 m to 1117 m, and with Versatec oil based mud from 1117 m to TD.

The 3/7-9 S well penetrated the target Sandnes Sandstone at a depth of 3524.1 m (3485.5 m TVD). The reservoir had expected average quality and thickness, but it was water wet. Sandnes and Bryne Formations showed a total net reservoir of 65 m on a gross of 155 m TVD (NTG 42%) and an average porosity of 16%. At the top of the interval, Upper Sandnes Formation has the best reservoir quality, with an average porosity of 18% and a NTG of 85%. These values are quite high if compared with nearby wells like 3/7-4 and 3/7-1 AH. Lower Sandnes and Upper Bryne Formations are in line with the averages of the area, with porosity of 16% and NTG of 75% and 65% respectively. Deeper in the well the Lower Bryne formation contains very little reservoir, with an average porosity of 11% and a NTG of only 8%, as it has been similarly observed in nearby wells. Throughout the well no oil shows was observed and only background gas readings were recorded.

No core was cut because the reservoir was found water wet. RCX water samples were taken at 3588 m.

The well was permanently abandoned on 28 April as a dry well.

### TESTING

No drill stem test was performed.

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 3/7-9 S