



## Wellbore History

### GENERAL

Well 8/10-4 A was drilled as a sidetrack to the Butch prospect discovery well, 8/10-4 S on the Sørvestlandet High the North Sea. The discovery well found oil in the Late Jurassic Ula Formation. The objective of the sidetrack was to identify an OWC.

### OPERATIONS AND RESULTS

Well 8/10-4 A was drilled with the jack-up installation Mærsk Guardian. It was sidetracked from a window in the 9 5/8" casing of 8/10-4 S at 2266 m in the upper part of the Balder Formation. Inclination was increased from vertical at kick-off point to 46.6 deg at top Ula Formation; along an azimuth of approximately 298 deg N. Total step-out from kick-off point was 724 m. The well was drilled to 3639 m (3360 m TVD) in the Late Triassic Skagerrak Formation. Here, well instability problems precluded the running of wire line logs, necessitating the drilling of a technical sidetrack. Technical sidetrack 8/10-4 A T2 was kicked off from Well 8/10-4 A at 2852 m in the uppermost part of the Rødby Formation and drilled in the same direction along a much reduced inclination, from 33.5 deg at kick-off to 22 deg at final TD. This sidetrack reached a TD at 3293 m (3203 m TVD) in the Late Triassic Skagerrak Formation. Both well bores were drilled with oil based mud from kick-off to TD.

Sidetrack 8/10-4 A penetrated top Ula Formation at 3432.6 m (3178.3 m TVD MSL), while the T2 sidetrack penetrated top Ula at 3196.7 m (3070 m TVD MSL). The Ula Formation was water wet in both well bores, and there were no indications of migrated hydrocarbons anywhere else in the well bores. RDT pressure measurements in the water leg of 8/10-4 A T2 combined with the RDT pressure measurements in 8/10-4 S oil column gave a very accurate location of the OWC at 2985 m TVD MSL.

No cores were cut. Three RDT water samples were taken at 3199 m.

A decision was made to evaluate the south-western segment of the Butch prospect, via a new relatively long, high angle sidetrack. The well was plugged back and prepared for sidetrack to well 8/10-4 B on 18 December 2011. It is classified as an oil appraisal.

### TESTING

No drill stem test was performed.

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 8/10-4 A