



Wellbore History

GENERAL

Well 35/9-11 A is a sidetrack to well 35/9-11 S. The well bores were drilled on the northern tip of the Ryggsteinen Ridge, west of the Gjøa Field. The two well bores had the same general objective: to appraise the 35/9-6 Titan Discovery. The 35/9-11 S well verified the Titan discovery. This initiated 35/9-11 A to perform data acquisition including coring, pressure measurement and fluid sampling.

OPERATIONS AND RESULTS

Appraisal well 35/9-11 A was kicked off at 3065 m in 35/9-11 S on 15 April 2014. It was drilled with the semi-submersible installation Leiv Eiriksson to TD at 3860 m in the Early Jurassic Statfjord Group. The sidetrack well was drilled parallel to the primary well bore at a distance ca 25 m from the primary well bore. No significant problem was encountered in the operations. The well was drilled with Glydril mud from kick-off to TD.

A 21 m thick sequence of Callovian sandstones was penetrated from 3270 m to 3291. These sandstones were absent in 33/9-11 S, just 25 m away. The rest of the Jurassic reservoir targets were also present in well 35/9-11 A. According to the petrophysical evaluation, hydrocarbons were proven in six different stratigraphic levels (Callovian-, Tarbert-, Etive-, Cook-, Johansen- and Statfjord-Formation).

The data acquisition in 35/9-11 A included MWD/LWD, 11 wireline runs including formation pressure/fluid sampling and 5 coring runs with a total recovery 83.6 m. Three cores were cut in the Tarbert Formation from 3440 to 3454 m; these should be shifted + 3.0 m to match the wire line logs. One core was cut in the Etive/Rannoch formations from 3497 to 3527 m; this core should be shifted +2.9 m to match the logs. One core was cut in in the Cook Formation from 3625 to 3667 m; this core should be shifted + 3.8 m to match the logs. The fluid samples were taken at 3272.5 m (oil with GOR ~250 Sm³/Sm³), 3469.5 m (oil with GOR ~500 Sm³/Sm³), 3495 m (oil with GOR ~600 Sm³/Sm³), 3637.8 m (oil with oil with GOR ~300 Sm³/Sm³), 3692.2 m (water), 3820.48 (mud), and 3822.2 m (water and mud).

The well was permanently abandoned on 21 May 2014 as an oil and gas appraisal well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 35/9-11 A