

Wellbore History

GENERAL

Well 25/2-18 S was drilled to test the Langfjellet prospect on the Bjørgvin Arch, four kilometers south of the 25/2-10 S (Frigg Gamma Delta) oil/gas discovery and eight kilometers north of the shutdown Frøy field in the North Sea. The objective of well 25/2-18 S was to prove petroleum in Middle Jurassic reservoir rocks belonging to the Vestland Group (the Hugin and Sleipner formations).

OPERATIONS AND RESULTS

Wildcat well 25/2-18 S was spudded with the jack-up installation Mærsk Interceptor on 6 August 2016 and drilled to TD at 3820 m (3812.7 m TVD). A technical sidetrack, 25/2-18 ST2, was kicked off from 25/2-18 S at 3345 m. The sidetrack was drilled in order to perform data acquisition in accordance with NPD regulations. The sidetrack was drilled to final TD at 3887 m in the Early Jurassic Drake Formation. No significant problem was encountered in the operations. The well was drilled with seawater and hi-vis sweeps down to 450 m and with Versatec oil based mud from 450 m from 450 m to TD.

Top of target reservoir, Hugin Formation, was penetrated at 3431.5 m (3424.2 m TVD) in 25/2-18 S, and at 3433 m (3424.9 m TVD) in the 25/2-18 ST2 sidetrack. In the sidetrack, the formation had a gross oil column of 125 m with a down-to contact at 3563 m (3554 m TVD). Net-to-gross of the Hugin Formation is 0.46 in well 25/2-18 S and 0.69 in the sidetrack. The difference in net-gross is due to a higher degree of cementation in well 25/2-18 S than in the sidetrack. The two boreholes penetrate the Hugin Formation ca 15 m away from each other.

The OBM produced a show of weak, dull, light yellow, direct fluorescence and fair, cut fluorescent. Due to this, and overbalanced drilling and structure destroying effects of PDC bits, shows on cuttings are unreliable. The sidetrack had good shows on conventional cores over most of the interval from 3431 to 3540 m in the oil-bearing reservoir.

In the sidetrack, two cores were cut in the interval 3427 m to 3553 m, and seven wireline logging runs were performed. Fluid samples were taken in the sidetrack at 2123.89 m, 3449.7 m, 3482.7 m, 3524.8 m and 3544.4 m.

The well was plugged back for geological sidetracks on 11 September 2016. It is classified as an oil discovery.

TESTING

No drill stem test was performed.