

Wellbore History

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GENERAL

Well 31/7-1 A is a geological sidetrack to 31/7-1 on the northern part of the Bjørgvin Arch between the Brage and Oseberg Sør fields in the North Sea. The 31/7-1 Brasse mainbore found oil and gas in the Late Jurassic Sognefjord Formation. The Brasse sidetrack was drilled in the southeast direction from 31/7-1, across a minor fault. The purpose was to reduce the uncertainty for the hydrocarbon contacts as well as to investigate the continuity and facies development of the reservoir.

OPERATIONS AND RESULTS

Appraisal well 31/7-1 A was kicked off at 913 m in the main bore on 22 June 2016. It was drilled with the semi-submersible installation Transocean Arctic to TD at 2530 m in the Middle Jurassic Fensfjord Formation. No significant problem was encountered in the operations. The well was drilled with KCl/polymer/GEM mud from kick-off to TD

The well encountered the Sognefjord Formation at 2370.5 m (2166.5 m TVD) at the prognosed depth, just below the Draupne shales. The Fensfjord Formation was encountered at the prognosed depth of 2477 m (2254.5 m TVD).

The Sognefjord Formation sandstones / siltstones were gas and oil bearing with a gross vertical hydrocarbon column of 5.5 m gas and 24.4 m oil. The Sognefjord Formation had 88 m gross vertical reservoir, with 41.2 m net reservoir and 12.3 m net vertical pay zone. The Fensfjord Formation was water bearing. The GOC was interpreted at 2380 (2172 m TVD) and the OWC at 2409.7 m (2196.4 m TVD), confirming the contacts from the mainbore. The only oil shows reported from the well were on the cores from the hydrocarbon-bearing part of the Sognefjord Formation.

Two cores were cut from 2362 to 2425 m with 100% recovery. MDT fluid samples were taken at 2399.5 m (oil) and 2409.8 m (water).

The well was permanently abandoned on 14 July 2016 as an oil and gas appraisal well.

TESTING

No drill stem test was performed.