

## **Wellbore History**

## **GENERAL**

Well 31/7-1 was drilled to test the Brasse prospect on the northern part of the Bjørgvin Arch between the Brage and Oseberg Sør fields in the North Sea. The primary exploration target for the wells was to prove and delineate petroleum in Middle Jurassic reservoir rocks (the Fensfjord Formation). The secondary exploration target was also in Middle Jurassic reservoir rocks (the Brent Group) and the third exploration target was in the Lower Jurassic (the Cook Formation and the Statfjord Group).

## **OPERATIONS AND RESULTS**

Wildcat well 31/7-1 was spudded with the semi-submersible installation Transocean Arctic on 23 May 2016 and drilled to TD at 2780 m in the Early Jurassic Johansen Formation. No significant problem was encountered in the operations. The well was drilled with seawater and hi-vis pills down to 908 m and with KCl/polymer/GEM mud from 908 m to TD.

The well encountered the Sognefjord Formation at 2154 m, just below the Draupne shales and overlaying the Fensfjord Formation. The Sognefjord sandstones/siltstones were found to be gas and oil bearing. Hydrocarbons columns of 18 m gas and 24.4 m oil were identified. MDT pressure data proved a GOC at 2172 m and an OWC at 2196.4 m GOC The Sognefjord Formation has 76 m gross reservoir, 28.76 m net reservoir, of which 21.13 m is net pay. Top Fensfjord was encountered at 2230 m. The Fensfjord Formation is mainly siltstones, and it is water bearing. Top Brent Group was encountered 6 m higher than prognosis, and all reservoirs were water bearing. The Cook Formation and the Statfjord Group were also water bearing. Oil shows were described in the hydrocarbon bearing part of the Sognefjord Formation, with weak shows below the OWC down to 2219 m. These were the only oil shows described in the well.

Two cores were cut in succession from 2165 to 2249 m with 100% recovery. MDT fluid samples were taken at 2158.3 m (gas), 2170.95 m (gas), 2182.2 m (oil), and at 2200.98 m (water).

The well bore was plugged back for sidetracking and abandoned on 22 June 2016 as an oil and gas discovery.

## **TESTING**

No drill stem test was performed.