

Wellbore History

GENERAL

Well 34/10-54 S was drilled to test the Valemon Nord prospect on the Tjalve Terrace in the North Sea. The prospect is situated north of the Valemon Field, between the Gullfaks South, and the Kvitebjørn fields. The primary objective was to prove commercial hydrocarbon volumes in the Middle Jurassic Brent Group.

OPERATIONS AND RESULTS

Wildcat well 34/10-54 S was spudded with the semi-submersible installation Transocean Leader on 2 September 2013 and drilled to TD at 4280 m (4249 m TVD) m in the Early Jurassic Burton Formation. Two pilot holes was drilled on location to check for shallow gas. No shallow gas was observed. The well was drilled with a slightly deviated well path below 2700 m with the purpose of hitting the Brent Group optimally. After cutting core no 5 from 4107 - 4128 m, operations were suspended for three weeks for inspection and repairs of fairlead on anchor line #1. The well was drilled with seawater and hi-vis pills down to 1217 m and with oil based XP-07 mud from 1217 m to TD.

Gas/condensate and oil down to situation was encountered in the Jurassic Brent Group. Gas/condensate was encountered also in the Jurassic Cook Formation. Pressure testing identified several pressure systems. No reliable hydrocarbon gradient could be defined and the hydrocarbon phases are interpreted from sampling. Oil shows were recorded on cores from the reservoir zones; otherwise, no oil shows were recorded in the well.

Seven cores were cut in the well. Cores 1 to 5 recovered 168.2 m core from the Brent Group the interval 3957 to 4128 m (98.4% recovery). Cores 6 and 7 recovered 19.7 m core from the Cook Formation in the interval 4179 m to 4202 m (85.7% recovery). MDT fluid samples were taken at 3953.01 m (gas condensate), 3987.53 m (gas condensate), 4024 m (oil), 4041.98 m (oil), 4059.01 m (oil), 4068.82 m (water), 4085.52 m (gas condensate), and at 4181.2 m (gas condensate).

The well was plugged back for side tracking on 11 February 2014. It is classified as an oil and gas discovery.

TESTING

No drill stem test was performed.