



Wellbore History

GENERAL

Well 34/3-3 A is a sidetrack to well 34/3-3 S on the Jordbær Vest west of the Knarr field (formerly called Jordbær) in the northern part of the North Sea. The objective of the 34/3-3A sidetrack was to delineate the 34/3-3 S discovery by confirming the extent of reservoir rocks and also proving oil in the lower part of the Cook formation up-dip and north of well 34/3-3 S.

OPERATIONS AND RESULTS

Appraisal well 34/3-3 A was kicked off at 2245 m in the primary well bore 34/3-3 S on 21 November 2011. It was drilled with the semi-submersible installation West Alpha to TD at 5013 m (3962 m TVD) in the Early Jurassic Burton Formation. It was drilled deviated with a sail angle of 57 deg to the Jordbær Vest A compartment of the Jordbær Vest structure. The well was drilled with Versatec oil based mud from kick-off to 4687 m and with Versatherm oil based mud from 4687 m to TD.

Sandstones belonging to the Cook Formation were penetrated at 4809 m (3840.4 m TVD). The Cook Formation consisted of two main sandstone packages. Light oil was encountered in the Upper Cook interval and this proved to be entirely oil-charged while the Lower Cook has a thin oil column and an observed Oil-Water contact (OWC) around 4874 m (3877.7 m TVD). Pressure survey data supported a Free Water Level (FWL) around 4876.2 m (3879 m TVD). Recorded formation pressures also proved that the Upper Cook reservoir has 1 bar (15 psi) lower pressure compared to the Lower Cook reservoir at the time of logging. Reliable oil shows on cuttings above the OBM was recorded only in the oil bearing part of the Cook Formation.

No cores were cut in the 34/3-3 A sidetrack. MDT fluid samples were taken at 4824.97 m in the Upper Cook Formation (oil), 4870.04 in the Lower Cook Formation (Oil), and at 4880.05 m in the Lower Cook Formation (water).

The well was suspended on 3 January 2011 for later conversion to development well (water injector). It is classified as an oil appraisal well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 34/3-3 A