



Wellbore History

GENERAL

Well 35/11-14 S is an appraisal well on the B-segment of the Astero discovery in PL090B. The Astero prospect is located north of the Fram West field, in the northern part of the 35/11-block. The target was Intra Heather Formation turbidite sandstones of Middle Oxfordian age derived from the Sognefjord delta in the East. The primary objectives were to test the presence and type of hydrocarbons in the Oxfordian sands, and assess reservoir quality, hydrocarbon column heights and regional pressure communication. Samples of all fluids were to be obtained. The TD criterion was to drill 100 m below base of the Intra Heather Formation reservoir section.

OPERATIONS AND RESULTS

Well 35/11-14 S was spudded with the semi-submersible installation Transocean Winner on 23 August 2006 and drilled to TD at 3306 m (3285.6 m TVD RKB) in the Late Jurassic Heather Formation. After drilling into Pliocene sands at 693 m the well started to flow. The well was then displaced to 1.5 SG kill mud. It was discovered that mud motor and 26" bit had been twisted off and left in the hole. The well was cemented back to 30" casing shoe and technically side tracked from 500 m. A new 26" section was drilled to 641 m. The well was drilled as a deviated hole, but close to vertical through the reservoir section. It was drilled with spud mud down to 640 m and with Glydril (2 - 4.5% glycol) from 640 m to TD.

The well was drilled within the fault bounded dip closure, shallow on the structure. The Intra Heather Formation sands (Oxfordian turbidites) were encountered as prognosed at 3103 - 3215 m (3083 - 3195 m TVD RKB). They contained commercial hydrocarbons with a gas oil contact at 3106.5 m (3086.5 m TVD RKB), and an oil water contact (Free Water Level) at 3126.0 m (3106 m TVD RKB). Good oil shows were observed down to 3158 m.

Two cores were cut from 3110 to 3164 m. They comprised mainly sandstones with occasional thin siltstones. The reservoir was logged on wire line. MDT fluid samples were taken at three depths. Water samples were obtained at 3144 m, and at this level a formation temperature of 118 deg C was recorded. Oil samples were taken at 3120.5 m, while condensate samples were taken at 3105.5 m.

The well was permanently plugged and abandoned on 7 December 2006 as an oil and gas appraisal.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 35/11-14 S