

## **Wellbore History**

## **GENERAL**

Well 34/10-46 S was drilled to a structure 5 km southwest of the Gullfaks field. The primary objective of the well was to be a water injector in Tarbert.. The other purposes of the well were to prove and produce oil from the Statfjord Formation D1-segment. On the way to the main target the well was going to prove and later produce oil from the Brent Group in the E1-segment.

## **OPERATIONS AND RESULTS**

The wildcat well 34/10-46 S was spudded on 12 December 2001 from the permanent installation Gullfaks A and drilled to TD at 5568 m in the Early Jurassic Statfjord Formation. The well was drilled with WBM down to 17 1/2" section, with low KCL content in the upper part of the 17 1/2" section. The 12 1/4" section was drilled with OBM to TD.

Shallow gas underneath GFA was expected in the intervals 392-399 m and possibly 559-567 m TVD RKB. The possible shallow gas zones in the 24" section were not logged. There was no increase of gas values in the specified intervals.

In well 34/10-46 S/46 A/46 B the Brent Group in segment E1 and the Statfjord Formation in segment D1 were reached by the 12 1/4" section. Base Cretaceous was penetrated 65 m deeper than prognosis due to a too shallow seismic interpretation. The top of the Brent Group was faulted out in the well and the Tarbert Formation was penetrated 29 m deeper than prognosis. The main fault between the E1 and D1 segments and the top Statfjord Formation were encountered at about estimated depths. A small gas discovery was made in the Brent Group in segment E1, whereas the Statfjord Formation in segment D1 was water-filled.

The reported reservoir pressures in well bore A-46 S are prognosed initial pressures, as no pressure measurements were performed in this well track. No fluid samples were collected and no coring was performed in the well.

Only minor amounts of hydrocarbons were encountered, and the well 34/10-46 S was plugged back on 30 January 2002 and re-classed to development well 34/10-A-48. Due to the water-filled Statfjord Formation in segment D1 it was decided to drill a side track, 34/10-46 A to the Cretaceous/Brent Group prospect D1.

## **TESTING**

No drill stem test was performed