



Wellbore History

GENERAL

The 6707/10-2 A Haklang West flank well is a sidetrack from well 6707/10-2 S. The surface well location is ca 3.5 km south-east of the 6707/10-1 Luva Discovery on the Nyk High in the Northern Norwegian Sea. The objective of the Haklang West flank well was to prove hydrocarbon in the Nise 2 sandstone.

OPERATIONS AND RESULTS

Wildcat well 6707/10-2 A was kicked off on 13 October 2008 from the original wellbore 6707/10-2 S at 3110 m MD, below the 9 5/8" liner shoe. It was drilled to TD at 4850.0 m (4325.0 m TVD) in the Late Cretaceous Kvitnos Formation. No significant technical problem was encountered in the operations. The well was drilled with Versatec DW oil-based mud from kick-off to TD.

The well penetrated the reservoir, the Kvitnos Formation, at 4426.0 m (4055.0 m TVD RKB). This reservoir was expected to be a part of the Nise Formation before drilling of the well (Nise 2 sandstone). Based on the biostratigraphy results, the stratigraphy was changed. Dry gas was proven, and the reservoir properties were moderately good (Net/Gross is 0.67 and a porosity of 0.17). The GWC was defined at 4487.0 m (4092.0 m TVD RKB) giving a gas column of 37.0 m. The 6707/10-2 A was drilled with oil-based mud, and the oil base had a weak fluorescence that made detection of natural petroleum fluorescence difficult.

Two cores were cut at 4434 to 4488 m in the Kvitnos Formation reservoir. Two separate MDT runs were performed. One intermediate run with MDT on wire line obtained samples from depths 3317.7 m (3303.8 m TVD RKB) and 3350.0 m (3333.7 m TVD RKB). Water was the moveable fluid obtained at both depths. The second MDT run was run on TLC. Two sampling depths and one scanning station were performed. At 4483.0 m MD/4089.6 m TVD gas was the movable fluid and at 4615.0 m MD/ 4169.0 m TVD water was the movable fluid. For the scanning station at 4489 m MD slugs of

water was observed and no samples were obtained at this depth.

The well permanently abandoned on 3 December 2008. It is a gas discovery.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6707/10-2 A