

## **Wellbore History**

## **GENERAL**

The exploration well 6403/10-1 was drilled to test the hydrocarbon potential in one of the segments of the PL 253 Solsikke dome structure. The Solsikke structure is situated in the north-western part of the outer Møre Basin, close to the Møre Marginal High, in the Norwegian Sea. The structure is defined as a large Tertiary dome comprising a thickness anomaly of Upper Cretaceous sediments. The primary target was the Nise and Intra Springar sandstones and the secondary target was the Intra Kvitnos sandstones. The well was drilled in a relatively low structural position on the southern part of the dome. The location was chosen to test the hydrocarbon potential above a clear flat event within the Nise Formation and at the same time penetrate the Springar in a position of anticipated good Springar reservoir quality near observed flat events within the Springar. The well should also test the intra Kvitnos Formation, but avoid faults within the formations and shallow gas observations. In addition, the spud location had to take into account the rough sea bottom.

## **OPERATIONS AND RESULTS**

Exploration well 6403/10-1 was spudded with the semi-submersible installation Scarabeo 5 on 24 October 2002 and drilled to TD at 3398 m in the Kvitnos Formation. No serious problems were encountered during drilling. The well was drilled with spud mud down to 2217 m and with a water-based glycol system (GLYDRIL) from 2217 m to TD.

Mudstone and siltstone were encountered in the Cretaceous reservoir section, with high content of siltstone in Nise. Sidewall cores of the siltstone in the Nise Formation showed high porosity but low permeability with no reservoir quality. The well did not prove any hydrocarbons. Organic geochemical analyses indicated immature formations throughout the well based on Rock-Eval Tmax and vitrinite reflectance readings. No significant amounts of C15+ hydrocarbons were detected in these analyses, confirming the on-rig shows analyses. There were however recorded traces of ?supermature? hydrocarbon gasses and gasoline range hydrocarbons (C1 to C9) in the interval 2500 m to 2800 m, indicating a migration pathway at this level. The well was not conventionally cored since the coring criteria were not met. Forty-eight sidewall cores were recovered. No pressure points were recorded on wire line and no fluid samples taken.

The well was permanently abandoned as dry on 30 December 2002.

## **TESTING**

No drill stem test was performed