



Wellbore History

GENERAL

The main objective of well 6407/6-5 was to appraise hydrocarbons in the Fangst Group and to enhance the understanding of the hydrocarbon characteristics, contact and distribution within the Mikkel structure. Block 6407/6 is situated in the fault zone separating the Trøndelag Platform and the Halten Terrace. The fault zone where the structural element Mikkel is situated is called the Bremstein Fault Complex. Secondary targets were to investigate the degree of communication with the gas proven in well 6407/6-3, and to investigate the presence of hydrocarbons in the Tofte and Tilje Formations of the Båt Group.

OPERATIONS AND RESULTS

Appraisal well 6407/6-5 was spudded with the semi-submersible installation "Byford Dolphin" on 15 November 1999 and drilled without major problems to a total depth of 2759 m in the Early Jurassic Tilje Formation. The well was drilled with seawater and bentonite down to 423 m, with KCl/PAC mud from 423 m to 1202 m, and with oil based mud ("Versavert") from 1202 m to TD. Oil and gas were encountered in the Fangst Group. The GOC was defined at 2543 m TVD MSL and an OWC was found at 2563 m TVD MSL, based on pressure gradients. This coincided with the hydrocarbon contacts proven in well 6407/6-3. MDT sampling gave gas samples from the Garn Formation (2382 m), oil from the Tofte Formation (2581 m), and water from the Tofte Formation (2626 m). Two cores were cut in the Ile, Ror, and Tofte Formations in the interval 2490 m to 2598 m. Recovery was 100 %. The well was permanently abandoned as a gas appraisal well on 27 December 1999.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6407/6-5