

Wellbore History

GENERAL

The objective for the well 9/2-5 was to appraise the extension of the oil-bearing sequence in the Beta East structure on the Yme field.

OPERATIONS AND RESULTS

Appraisal well 9/2-5 was spudded with the semi-submersible installation "DeepSea Bergen" on 23 June 1995 and drilled to a total depth of 3355 m in the Middle Jurassic Bryne Formation. The well was drilled with very small target tolerances, hence a directional assembly with motor was utilized in order to steer. The well had a final inclination of 2.1° and hit target according to tolerances. The well was drilled 13 days faster than planned; especially the drilling operations went faster than expected. The well was planned and drilled without the use of 20" casing, which gave substantial time saving. The well was drilled with seawater and hi-vis pills down to 1750 m and KCl mud with glycol from 1750 m to TD. The Sandnes and the Bryne Formations were penetrated slightly deeper than prognosed. Both proved better reservoir quality than expected based on information from the well 9/2-3. FMT sampling proved that the Beta East structure has the same oil gradient and water gradient as the Gamma structure. The oil/water contact was recorded at 3270 m TVD (3247 m TVD MSL). Two cores were cut in the interval 3154 to 3193 m in the Sandnes Formation. Several FMT runs were initiated to obtain representative formation fluid samples from the Sandnes Formation. The content of the first segregated sample, Run 2A, confirmed considerable invasion of mud filtrate and made it necessary to increase the volume of the pre-flush chamber. This change in tool configuration led to several misruns due to operational tool failures. Finally, in Run 2F, indications of a successful segregated sample were obtained and the 4-liter PVT chamber was transferred to standard PVT bottles for onshore PVT analysis. One more attempt, Run 2G, was performed

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 9/2-5