



Wellbore History

GENERAL

Well 16/1-6 A is a sidetrack to the 16/1-6 S discovery on the Utsira High in the North Sea. The objective of well 16/1-6A was to penetrate the Heimdal Formation down flank, where a flat event had been mapped, in order to appraise the extent of the gas discovery and possibly penetrate a hydrocarbon - water contact.

OPERATIONS AND RESULTS

Appraisal well 16/1-6 A was spudded with the semi-submersible installation Borgland Dolphin on 8 June 2003. The well was kicked off at 1215 m in 16/1-6 S and drilled to TD at 2194 m in the Late Cretaceous Tor Formation. It was drilled with oil-based mud (Novatec) from kick-off to TD.

Grid sands were penetrated from 1529.5 m (1480.5 m TVD MSL) to 1757 m (m TVD MSL). The Heimdal Formation came in at 2006.5 m (1850.5 m TVD MSL), which was considerably deeper than expected. The Heimdal Formation was also thinner than expected. Wire line and MWD logs showed relatively high resistivity readings combined with high porosity within the uppermost 2 ? 3 m of the Grid sandstone, but no conclusions regarding the presence of hydrocarbons could be drawn from these weak indications. Weak shows in the Heimdal Formation were considered to be residual only. From logs both the Grid and the Heimdal sandstones were concluded to be water wet. One core was attempted in the Grid Formation, but junk in the hole prevented the core from entering the core barrel, hence no recovery. MWD log data were collected from the whole well track, while the majority of the wire line logging, including MDT and VSP, had to be abandoned due to tight, partly collapsed hole.

The well was permanently abandoned on 21 June 2003 as a dry hole.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 16/1-6 A