



## Wellbore History

### GENERAL

Well 24/12-5 S is located in the Vana sub-basin in the North Sea about 20 km north of the 15/3-1 S Gudrun discovery, and about 20 km west of Balder. The exploration target for well 24/12-5 S was to delimit the Heimdal Formation discovery made in well 24/12-3 S in 1996. A base case oil column of 34 meters was prognosed at the well location. The oil column was calculated based upon the found oil water contact in well 24/12-3 S, which for the base case top reservoir map coincided with the structural spill. The Heimdal sandstone has a continuous extension in the area. Well 24/12-5 S was planned with a TD of approximately 30 m into the Heimdal Sands or 30 m below a found OWC.

### OPERATIONS AND RESULTS

Well was spudded with the semi-submersible installation on and drilled to TD at 2325 m (2239 m TVD) in the Paleocene Heimdal Formation sandstones. The well path was vertical down to 750 m, building angle up to a maximum of 25 deg at 1297 m, then falling off to 17 deg towards TD. A total of 21% Non-Productive Time was experienced in the well, mostly related to problems during plug and abandon, and 6% Waiting On Weather. The well was drilled with seawater and sweeps down to 658 m, with KCl/Glycol Enhanced Mud from 658 m to 1592 m, and with KCl/polymer mud (Performadril) from 1592 m to TD.

The target top Heimdal Formation was penetrated at 2277 m (2194 m TVD), 15 m TVD deeper than prognosed. The Heimdal Formation contained good quality reservoir sandstone. The well was however dry with no oil shows and generally low levels of gas.

No cores were cut and no wire line logging or fluid sampling was performed.

The well was permanently abandoned on 21 December 2007 as a dry well.

### TESTING

No drill stem test was performed.

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 24/12-5 S