



## Wellbore History

### GENERAL

Well 24/9-10 S was drilled on the Caterpillar prospect ca 7.5 km south-southeast of the Bøyla field in the South Viking Graben. The primary objective was to establish the presence and phase of hydrocarbon resources in the Paleocene Hermod Formation reservoir. Contingent upon discovery, the optional sidetrack well (10 A) would be drilled to further evaluate hydrocarbon resources contained within the Caterpillar prospect.

### OPERATIONS AND RESULTS

Wildcat well 24/9-10 S was spudded with the semi-submersible installation Transocean Winner on 6 January 2011 and drilled to TD at 2339 m (2187 m TVD) in the Late Paleocene Lista Formation. Drilling proceeded without significant problems. The well was drilled with seawater, hi-vis sweeps, and spud mud down to 507 m, with Glydril mud from 507 m to 975 m, and with Versatec oil based mud from 975 m to TD.

The well penetrated top Hermod Formation at 2211 m (2088 m TVD) 10 m TVD shallower than prognosed. The Hermod Formation had 35 m of net reservoir quality sands, predominantly fine occasionally medium quartz aggregate with conglomeratic material, some calcite cemented stringers and non net shale beds. Average porosity in the reservoir of 24.6% was determined from the density log. An oil down to was interpreted at 2239 m (2110 m TVD) above which 17.3 m (13.0 m TVD) net of movable hydrocarbons were interpreted within the Hermod Formation with an average net water saturation of 46.2%. The oil leg was confirmed by the pressure gradient. Below the interpreted oil down to the sand development is much more inter-bedded and fine grained, and few pressure points could be taken here. A water sample was taken at 2253 m, but a residual oil column is interpreted throughout the Hermod Formation.

Uniform light brown oil shows were described throughout the oil bearing reservoir both on the cuttings and the core. Continuous natural fluorescence, stain, and petroleum odour was seen further down on the cores to 2264 m, and also at the base of core 2 at 2278 m. Otherwise the oil based drilling mud produced a background weak dull yellow direct fluorescence and faint cut fluorescence. Combined with overbalanced drilling this masked virtually all natural fluorescence (shows) on cuttings from the well.

Two cores were cut in the Hermod Formation from 2223 m to 2278 m. An MDT oil sample was taken at 2222.6 m.

On 2 February 2011 the well was cemented back for an appraisal sidetrack. The well bore is classified as an oil discovery.

### TESTING

No drill stem test was performed.

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 24/9-10 S