



Wellbore History

GENERAL

Well 24/9-9 B was drilled to appraise the oil discovery on the Marihøne A prospect made by 24/9-9 S in the Vana Sub-basin ca 6 km east of the UK border in the North Sea. The objective was to test a low amplitude anomaly area 1.5 km south of 24/9-9 S.

OPERATIONS AND RESULTS

Appraisal well 24/9-9 B was drilled with the semi-submersible installation Songa Dee. It was kicked off from near vertical at 1036 m in well 24/9-9 S on 15 October 2009. The hole angle was built up through the Grid sands and reached 65 deg inclination in the Sele claystones. There were no incidents of well bore instability or any increase in background gas, indicating that the pressure was within prognosis. TD was set at 3005 m in the Paleocene Sele Formation. The well was drilled with Versatec oil based mud from kick-off to TD.

The reservoir sand of the Hermod Formation was encountered at 2925 m (2058.2 m TVD MSL). The Hermod Formation was oil bearing with a 13.2 m TVD oil leg down to an OWC at 2955 m (2071.4 m TVD MSL). Due to a higher shale volume in this segment compared to the two first Marihøne A wells the net pay was only 7.9 m with average porosity of 23% and average Sw of 46%. The gross thickness of the Hermod reservoir in 24/9-9 B was 25 m TVD. The oil based mud used produced a background weak dull yellow direct fluorescence and faint cut fluorescence, which effectively masked any mineral oil show. Additionally the solvent properties of the mud, combined with the structure destroying effect of the PDC bits and the flushing effect due to the overbalanced mud weight may have removed virtually all trace of shows from disaggregated sand grains and minimised or removed shows from sandstone aggregates.

No cores were cut in 24/9-9 B. No wire line logs were run and no fluid samples taken.

The well was permanently abandoned on 25 October 2009 as an oil appraisal well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 24/9-9 B