



Wellbore History

GENERAL

Well 2/1-13 S was drilled on the TR3 prospect located on the south-western margin of the Hydra High, 14 km southwest of Gyda, 8 kilometres southwest of the Gyda South Field and 1.5 kilometres southwest of the closest well 2/1-11. The well was drilled in a more crestal position than 2/1-11. The primary target of the well was fluvial channel sands of the Triassic Skagerrak Formation. Secondary objective was the Bryne reservoir.

OPERATIONS AND RESULTS

Well 2/1-13 S was spudded with the jack-up installation Maersk Guardian on 6 November 2008 and drilled to TD at 4435 m in the Triassic Skagerrak Formation. The 36" top hole was drilled to 214 m, followed by a 12 1/4" pilot hole to 620 m to check for shallow gas. Although some gas was encountered it was not of sufficient quantity or pressure to cause concern. Further drilling proceeded without significant problems down to TD in the 16" section at 2416 m. When running the 13 3/8" casing, it could not pass 2093 m. Due to well bore stability problems and the long rat hole left as a consequence of setting the casing shoe high, the well was sidetracked below the casing shoe. This technical sidetrack, 2/1-13 ST2, was drilled to final TD. The well was drilled with Pre-hydrated Bentonite/CMC/seawater down to 620 m, with Versatec oil based mud from 620 m to 4149 m, and with Warp HTHP oil based mud from 4149 m to TD.

The top of the reservoir was encountered 63 m shallower than prognosed, at 4241 m (4124 m TVD SS) and had 1m of possible pay in sandstones in the interval 4252 to 4276 m. Shows were seen throughout this interval. No OWC was recognised on the logs, but ODT was at 4362 m (4152.0 m TVD SS). The stratigraphy of the reservoir is somewhat uncertain, but it is believed that the upper part down to 4362 m belong to the Bryne Formation, while the underlying sand belong to the Skagerrak Formation. The Skagerrak Formation was dry.

One core was cut in the Bryne Formation from 4274 to 4301 m. The RCI tool was run on wire line to take pressure points, but only the Skagerrak Formation gave valid pressures, proving a water gradient of 1.05 sg. The Bryne Formation proved to be tight. No fluid samples were taken.

The well was permanently abandoned on 7 March 2008 as a dry well with oil and gas shows.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 2/1-13 S