



GENERAL

Appraisal well 7/11-11 S was drilled on the Mime Field, which is situated on the Cod Terrace in the North Sea. A previous well on Mime, 7/11-10 S produced 484000 Sm3 oil equivalents between 1990 and 1993 before being abandoned due to asphaltene precipitation. In the neighbour Mime well 7 /11-5 an oil contact was found at 4176 m TVD MSL, but this was thought to be a down-to contact set by lithology and not a true OWC. The primary objective of 7/11-11 S was to prove a deeper contact within the Ula Formation reservoir zone than the contact found in 7/11-5. The appraisal was drilled on the Mime Main proven segment and, depending on the results, two sidetrack appraisals into either Mime Main or Mime West was planned.

OPERATIONS AND RESULTS

Well 7/11-11 S was spudded with the jack-up installation Mærsk Giant on 29 March 2007 and drilled to TD at 4679 m (4444 m TVD RKB) in the Triassic Smith Bank Formation. The well path was vertical down to ca 1350 m. Angle was built to ca 24 deg at ca 1900 m and was kept within 13 - 25 deg from there to TD. It was drilled with Seawater and bentonite sweeps down to 800 m, with KCL/Polymer mud from 800 m to 1323 m, and with Carbosea invert emulsion oil based mud from 1323 m to TD.

Top Ula Formation was encountered at 4470 m (4200 TVD MSL), 15 m shallow to prognosis. It was however 67 m thicker than expected, but the effective reservoir zone within Ula was encountered as deep as 4256 m TVD MSL due to a thicker non-reservoir top Ula sequence than expected. Station log measurements were undertaken with the CMR tool at 6 depths in the Ula Formation and interpreted via Magnetic Resonance Fluid Characterisation (MRF). The results indicated 2 hydrocarbon phases, a heavy viscous oil and a light oil (probably OBM filtrate). These results were in direct contrast to the core, produced fluids and other log evaluation. Despite efforts to resolve this enigma the CMR MRF results remain in contradiction to the other data. The reservoir was concluded to be water bearing with only some poor shows in the top ca 15 m. The rest of the well had no shows other than high gas readings in the Mandal Formation. A total of 26 pressure measurements were attempted in the Ula Sandstone (24) and Smith Bank (2) between 4501m and 4632 m using a large diameter probe and a dual packer. No stable pressures could be obtained. The maximum temperature recorded (non-corrected) was 167.9 deg C, measured at 4622 m during the final MDT run. The low permeability in the reservoir made further development of the well unviable and it was decided to plug back and abandon without testing or further sidetracks.

Two cores were cut at 4479 to 4587 m in the Ula Formation. Core #1 at 4479 - 4533 m cut 54 m, but recovered 55.76 m due to re-packing of core. The core catcher backed off resulting in the core slipping out of the inner barrel. Thus, the core had to be retrieved from the outer barrel and inserted manually into the inner barrel. An MDT water sample was obtained from 4541 m.

The well was permanently abandoned on 10 June 2007 as a dry well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7/11-11 S