



Wellbore History

GENERAL

Well 30/7-8 R is a re-entry of well 30/7-8, which was suspended with TD at 4287 m due to technical problems, without fulfilling the well objectives. The well was drilled on the Norwegian part of the Shetland Basin in the northern North Sea. The objectives were to test the hydrocarbon potential in the Middle Jurassic Brent Group (primary objective), and the Early Jurassic Cook Formation and Statfjord Group (secondary objectives).

OPERATIONS AND RESULTS

Appraisal well 30/7-8 was re-entered with the semi-submersible installation Treasure Seeker on 23 November 1980. It was kicked off at 3755 m and drilled to final TD at 4813 m in the Late Triassic Hegre Group. No significant problem was encountered in the operations. The well was drilled with Spersene/XP-20/Resinex/Drispac water based mud from kick-off to TD.

The primary target reservoir, Tarbert Formation came in at 4058 m. It contained gas condensate with a gas/water contact at 4112 +/- 5 m, based on pressure gradients. Shows were described on cuttings and cores over the interval 4489.3 to 4555 m in the Statfjord Group, Nansen Formation.

Ten cores were cut in the well. Cores 1 - 8 were cut from 4062.3 m to 4159.3 m in the primary target Tarbert Formation sandstones, while cores nine and ten were cut in the intervals 4489.3 to 4502.5 m and 4527.1 to 4540.6 m, both in the Statfjord Group. The core depths are 4-5 m deeper than the logger depths. RFT fluid samples from 4105 m recovered gas, condensate, water and mud filtrate.

The well was permanently abandoned on 29 January 1982 as a gas/condensate discovery.

TESTING

One drill stem test was performed from perforations in the interval 4064 to 4070 m. The test produced 478 Sm³ condensate and 617590 Sm³ gas /day through a 32/64" choke. The separator GOR was 1291 Sm³/Sm³, the condensate gravity was 41.3 °API, and the gas gravity was 0.679 (air = 1). The gas contained 2.3% CO₂. The bottom hole temperature measured in the test was 143 °C.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 30/7-8 R