



### Wellbore History

**GENERAL**

Well 7/11-1 was drilled on eastern side of the Breiflabbb Basin in the southern North Sea, ca 3km from the UK Border. The main objective was to test the hydrocarbon potential of the Tertiary and the Mesozoic sediments. Specific objectives were Paleocene sandstone, the Late Cretaceous carbonate section, and the Jurassic. Sandstones in the Early Cretaceous and Triassic were seen as possible secondary targets.

**OPERATIONS AND RESULTS**

Wildcat well 7/11-1 was spudded with the semi-submersible installation Ocean Viking on 26 February 1986 and drilled to TD at 3974 m in Late Permian Zechstein Salt. The only significant drilling problem encountered was sloughing of shale between ca 1675 m and 2315 m. Deviation was negligible above 3500 m, from where it increased from 4.5 deg to 11.5 deg at approximately 3960 m. The true vertical depth therefore probably is 4-5 m short of measured depth at TD. A Drispac-Flosal-Desco mud system was used to a depth of 3290 m. At this depth the system was converted to a sodium chloride saturated Drispac-Flosal-Desco system. The salt saturated system was used to total depth.

The well proved gas and condensate in three tests in a 5 m thick intra-Balder Formation sand (DST 5) and the Forties Formation from top at 2904 m down to 2989 m (DST 3 and 4). Below this depth DST 1 and 2 produced only minor amounts of hydrocarbons due to tight formation. Top salt came in under the Late Cretaceous Hidra Formation at 3740 m.

Three cores were taken in the Paleocene sandstone in the intervals 2922.7 - 2932.8 m, 2932.8 - 2949.9 m, and 2952.9 - 2966.9 m. A fourth core at TD had no recovery. No wire line fluid samples were taken.

The well was permanently abandoned on 15 June 1968 as a gas/condensate discovery.

**TESTING**

Five drill stem tests were performed.

DST 1 was performed from the interval 3124 to 3161 m. This test produced only diesel with "dark brown dissolved hydrocarbon".

DST 2 was performed from the interval 3101 to 3108 m. This test produced 0.8 m3 oil in water out of 5 m3 in total.

DST 3 was performed from the interval 2977 to 2989 m. The test produced 106 Sm3 condensate and 167000 Sm3 gas /day through a 5/8" choke. This corresponds to a Gas/Condensate Ratio of 1575 Sm3/Sm3. Reported reservoir temperature was 113 deg C.

DST 4 was performed from the interval 2904 to 2956 m. The test produced 135 Sm3 condensate and 714000 Sm3 gas /day through a 3/4" choke. This corresponds to a Gas/Condensate Ratio of 5280 Sm3/Sm3. Maximum flow on variable chokes up to 2" was up to 430 Sm3 condensate and 1254000 Sm3 gas /day . Reported reservoir temperature was 110 deg C.

DST 5 was performed from the interval 2877 to 2882 m. The test produced 76 Sm3 condensate and 184000 Sm3 gas /day through a 26/64" choke. This corresponds to a Gas/Condensate Ratio of 2412 Sm3/Sm3. Reported reservoir temperature was 109 deg C.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7/11-1