



**Wellbore History**

GENERAL

Well 1/9-2 was drilled on a salt diapir structure located in the Feda Graben in the southern North Sea. It was drilled to confirm and further evaluate the proven hydrocarbons found on this seismic structure by the 1/9-1 well.

OPERATIONS AND RESULTS

Appraisal well 1/9-2 was spudded with the semi-submersible installation Ross Rig on 1 June 1977 and drilled to TD at 3459 m in the Late Cretaceous Hod Formation. No significant problems were encountered in the operations. The well was drilled with spud mud down to 439 m and water based with lime/Drispac/lignosulphonate mud systems from 438 m to TD.

Good oil show was observed in a thin sandstone stringer at 1632 m in the Hordaland Group. Oil in cuttings was recorded also at 1710 m and 2858 m in claystones. The Ekofisk Formation was encountered at 3120 m with shows and tested small amounts of oil. The Tor Formation came in at 3195 m with shows and tested small amounts of oil. Below 3213.5 m only rare and weak fluorescence was observed on limestone.

The interval 3135-3215 in the Ekofisk and Tor formations was cored with nearly 100% recovery. RFT pressure readings were attempted in the Tor and Ekofisk formations, but all were unsuccessful due to tight formation. No fluid samples were taken.

The well was permanently abandoned on 12 August 1977. The poor results from DST are classified as shows.

TESTING

Two drill stem tests were carried out.

DST 1 tested the Maastrichtian Tor Formation (3197 - 3209 m) and flowed approximately 6 - 10 m<sup>3</sup>/day of acidwater after stimulation, slugging badly. 2-10% of oil was measured in samples. The oil gravity was 34.0 deg API.

DST 2 & 2A tested the Danian Ekofisk Formation (3130 - 3154 m). The flow stabilized at approximately 13 - 15 m<sup>3</sup>/day of acidwater after the retest effort. Clean samples of formation fluids were not obtained, but this interval produced long enough to approach clean-up. 2-17% of oil was measured on samples taken during flow and reversing sequences with the smaller value probably being more representative. Oil gravity was 35.2 - 35.7 deg API.

**LITHOSTRATIGRAPHY & HISTORY FOR WELL: 1/9-2**