



**Wellbore History**

GENERAL

Well 9/4-4 is located east of the Flekkefjord High on the western flank of the Egersund Sub-basin, which forms a part of the Danish-Norwegian Basin. The main objective of drilling 9/4-4 was to test the middle Jurassic sands on the western flank of the Egersund sub-basin. Alternating porous and nonporous sands of Late Triassic and possible minor Late Jurassic sands were considered secondary objectives.

OPERATIONS AND RESULTS

Wildcat well 9/4-4 was spudded with the semi-submersible installation Deepsea Saga on 19 July 1977 and drilled to TD at 2902 m, 57 m into the Triassic Skagerrak Formation. No significant problems were encountered in the drilling operations. The well was drilled with high-viscosity spud mud down to 405 m, with gypsum mud from 405 m to 1300 m, and with lignosulphonate mud from 1300 m to TD. At 2807 m the pipe stuck and was freed by adding "Pipefree" and diesel to the mud.

The Middle Jurassic sands with a gross thickness of 117 m were found as postulated. Secondary objective reservoir sands in Late Triassic and Late Jurassic were not encountered. No oil shows were encountered in any section of the well and no hydrocarbons could be inferred from logs. The most likely reason for the lack of hydrocarbons is immaturity of the Jurassic source beds. Organic geochemical source rock screening of the interval 250 m to TD showed good to excellent source rocks in the Late Jurassic shales and the Middle Jurassic (Bryne Formation) coals. The analyses showed that the Bryne coals were immature for petroleum generation and that the Late Jurassic shales were immature, possibly marginally mature. No conventional core was cut and no fluid samples taken. Fourteen sidewall cores were recovered from the interval 2673 m to 2850 m.

The well was permanently abandoned on 20 August 1977 as a dry hole.

TESTING

No drill stem test was performed.

**LITHOSTRATIGRAPHY & HISTORY FOR WELL: 9/4-4**