

## Wellbore History



Well 9/12-1 is located in the North Sea, in the Danish-Norwegian Basin west of the Krabbe Fault Zone and Lista Fault Blocks. It was drilled near the crest of a salt induced anticlinal feature. The well is very similar to the 9/8-1 well, but the various geological units are somewhat thinner in 9/8-1. The objective of the well was to test the Tertiary and Mesozoic sequences.

## OPERATIONS AND RESULTS

Wildcat well 9/12-1 was spudded with the semi-submersible installation Sedneth I on 28 March 1969 and drilled to TD at 2698 m in the Triassic Smith Bank Formation. The 36" hole was drilled to 133 m and the 30" casing was run to 131 m. An 18 1/2" hole was drilled to 403 m, and two joints of 20" casing were hung from the 30" housing before the 13 3/8" casing was set at 395 m. Seawater was used as drilling fluid in the 36" and 18" holes and the returns were to the sea floor. After the setting of the 13 3/8" casing the mud system was converted to a Spersene/ XP-20 seawater mud, which was used to TD.

The well encountered porous Danian/Late Cretaceous limestones as well as Triassic and Jurassic sandstones, but no hydrocarbons. The Triassic was represented by about 600 m of continental red beds. There was a major unconformity to the overlying 65 m thick Middle Jurassic sandstones, which represent a marginal marine, deltaic environment. The Late Jurassic consisted of 165 m of mainly dark shales. During the Early Cretaceous in excess of 300 m of shales were deposited in the area while the Late Cretaceous is represented by 375 m of carbonates. From the Tertiary on the sedimentation turned to a clastic regime. Deposition of fine-grained sediments prevailed although this was interrupted by the deposition of more sandy units. The Tertiary is made up of about 1200 m of sediments in this well. Late Jurassic source rocks were confirmed by the well, but were found immature. The absence of hydrocarbons was by the operator firmly attributed to the immaturity of source rocks. No conventional core was cut and no fluid sample taken. Sixty-eight sidewall cores were recovered.

The well was permanently abandoned on 6 May 1969 as a dry hole.

## TESTING

No drill stem test was performed.

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 9/12-1