



Wellbore History

GENERAL

Well 9/4-2 was drilled on a salt-induced, anticlinal structure in the Egersund Basin in the North Sea, 11 km to the north of the 9/4-1 location. The primary objective was the Middle Jurassic sandstone, but also Triassic sands were considered prospective. Danian and Late Cretaceous chawks were seen as secondary objectives.

The well is Type Well for the Base Cretaceous Flekkefjord Formation in the Norwegian-Danish Basin.

OPERATIONS AND RESULTS

Wildcat well 9/4-2 was spudded with the jack-up installation Gulf Tide on 19 July 1970 and drilled to TD at 3025 m in the Middle Triassic Skagerrak Formation. Three casing strings were set in the hole. The 20" casing was originally planned around 600 m but stopped short at 282 m where it had to be set. Except for this, the hole was drilled without significant technical problems. The hole was drilled with seawater as drilling fluid down to 99 m from where a seawater gel with spersene was used. Diesel oil was used as emulsifier.

Danian and Late Cretaceous chawks were penetrated from 1323 m to 1936 m and were found water wet. The target Middle Jurassic sands (Sandnes Formation) was encountered at 2490 m. The sand was white, medium to coarse grained, poorly consolidated, calcareous, with thin interbeds of red to grey, micaceous shale. This sandstone appears to be an excellent reservoir, of the total thickness of 50 m about 48 m appeared to be a porous sandstone on the logs with porosity of about 24 percent. The Triassic (Skagerrak Formation) was encountered at 2633 m. It consisted of red, soft, occasionally calcareous and micaceous claystone with interbedded red to white, fine to coarse grained, in part calcareous sandstone. No hydrocarbon shows were encountered in the well. No conventional cores were cut and no fluid samples taken.

The well was permanently abandoned on 29 August as a dry hole.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 9/4-2