



Wellbore History

GENERAL

Well 2/8-12 S was drilled on the eastern flank of the Middle and Late Jurassic "Mode" salt feature in a location ca 12 km north of the Valhall Field. The well was planned deviated to avoid the Ekofisk-Emden gas pipeline. The objective of the well was to test the reservoir and possible hydrocarbon potential in the Late and Middle Jurassic sands in the deepest part of the Central Trough, determine the source rock potential and maturation as well as the Jurassic stratigraphy, and determine the Late Cretaceous/Tertiary stratigraphy of the chalk section.

OPERATIONS AND RESULTS

Wildcat well 2/8-12 S was spudded with Stena Equipment semi- submersible installation Dyvi Stena on 7 November 1988 and drilled to TD at a total depth of 5300 m in the Triassic Group. The well was drilled with seawater down to 904 m, with seawater/PAC/PHPA from 904 m to 3360 m, with seawater/Low Lime fro 3360 m to 4024 m, and with freshwater/Hoestadrill mud from 4024 m to TD. Shallow gas was encountered in sands around 930 meters. The well was stabilised with heavy mud, and there was no damage or injuries.

A major normal fault cuts through the chalk section and caused major problems with lost circulation. Later biostratigraphic analyses showed that most of the Hod Formation was faulted out in the well. The lower Cretaceous section was thicker than expected due to a 241 m of unexpected Early Cretaceous limestone/dolomite (Tuxen Formation). The Late Jurassic shales of the Tyne Group was encountered at 4000 m and proved to be 1191 m thick, which also was thicker than expected. It consisted of the Mandal (42 m), Farsund (165 m) and Haugesund (985 m) Formations. The lithology of the group was generally silty claystone/shale with dolomite/limestone stringers. Organic geochemical analyses of cuttings proved very good source rock potential throughout the whole Group, with the better potential found in the Mandal and Farsund Formations. Top of the oil window is at around 3500 m. Some shows were observed in chalk of the Ekofisk and Tor Formations. One core was cut in the Triassic sands from 5226.5 m to 5244.5 m. The well was permanently abandoned 27 April 1989 as a dry hole with oil/gas shows.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 2/8-12 S