

Wellbore History

GENERAL

Well 2/6-2 is located on the Piggvar Terrace just east of the Mandal High in the southern Norwegian North Sea. The main objective of the 2/6-2 well was to test a possible hydrocarbon accumulation of a lens-shaped seismic anomaly in the Lower Cretaceous. The anomaly showed both up dip truncation and structural closure, it was believed to represent a deep sea fan type sand deposit. A secondary objective was to explore the upper part of the Jurassic series below the Kimmeridgian unconformity.

The well is Reference well for the Tuxen Formation.

OPERATIONS AND RESULTS

Wildcat well 2/6-2 was spudded with the semi-submersible installation Dyvi Alpha on 3 January 1980 and drilled to TD at 4760 m in Permian Zechstein salt. The hole was side-tracked from 4175 m due to loss of MFT tool in the hole at 4276 m.

In the Early Cretaceous only tight, mainly water bearing limestones were found. The Jurassic consisted of the Mandal, Farsund, Haugesund, and the Bryne Formations, with the latter resting directly on the salt at 4723 m. In the Late Jurassic a hydrocarbon bearing but tight limestone body was unexpectedly found. The Middle Jurassic Bryne sandstones were found gas bearing. Shows were reported as follows: Down to the top of the Jurassic at 4118 m only minor amounts of gas were recorded and the first occurrence of C2 was seen at 4100 m. Fluorescence of a yellow golden colour and greenish white cut was seen on Early Cretaceous limestones from 3870 to 3877 m, this led to the cutting of Core 1 at 3877 to 3886 m. On the core no direct fluorescence was seen, only a weak, cloudy yellow/greenish cut which terminated at 3881 m. Direct fluorescence and cut was seen on Late Jurassic limestones between 4179 and 4230 m. further, on Cores 2 and 3 taken from 4220 to 4235.5 m there was seen good yellow to bluish direct fluorescence. Some bubbling of gas was also seen and seepage of oil from shaly joints. Some cut was seen on siltstone at 4400 m and oil appeared in the mud down to 4465 m.

No wire line pressure measurements or fluid samples were taken.

The well was permanently abandoned on 25 May 1980 as a minor discovery.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 2/6-2