

Wellbore History

GENERAL

Wildcat well 2/7-12 was drilled on an intrusive salt plug in the upper left corner of the block, some km west of the Ekofisk and Edda fields in the Southern Norwegian North Sea. The salt plug is located in the cross-junction between the four blocks 1/6, 1/9, 2/4, and 2/7. The objective was to establish if Danian - Late Cretaceous carbonates were present on the salt plug. If present the carbonates would be evaluated.

OPERATIONS AND RESULTS

Well 2/7-12 was spudded with the semi-submersible installation Dyvi Beta on 17 December 1978 and drilled to TD at 1832 m in the Late Permian Zechstein Group. The well was drilled with salt-based mud, possibly with some diesel addition according to geochemical analyses, in the interval from 1402 m to TD. Several thin gas charged siltstone stringers were penetrated between 433 m and 835 m.

The salt (Permian Zechstein Group) was encountered at 1686 m. The well did not encounter any Danian -Late Cretaceous carbonates on top of the salt. Oil shows (fluorescence, cut, stain or combinations) were recorded on SWC's and cuttings at 114.5 - 445 m (sandstone), 731 - 810 m (claystone with trace of fine sandstone), and scattered on claystone, shale, and limestone from 1469 m to 1679 m. The resistivity log indicated a probable hydrocarbon zone from 416 to 433 m in a shallow sand. It was not possible to calculate reliable porosity from the sonic log, but a DST confirmed minor amounts of oil.

Ninety sidewall cores were attempted and seventy-one were recovered from the overall interval 1417.3 to 173.7 m. No conventional cores were cut and no wire line fluid samples taken in this well.

The well was permanently abandoned on 30 January 1979 as a dry well with shows.

TESTING

One drill stem test was performed through perforations at 416.7 - 425.8 m. The tool was open 22 minutes; shut in one hour and 58 minutes, open 3 hours and shut in 3 hours and 58 minutes. No gas came to surface. Reversed out and recovered approximately 5 barrels of fluid, consisting of 31% sediments, 43% water (2.15 barrels) and 26% oil - oil emulsion (1.3 barrels).