

Wellbore History

GENERAL

Well 16/5-1 is located on the Utsira High in the North Sea. The main target of the 16/5-1 well ("Vali") was a pinch-out of Paleocene sands on a seismic monoclinal. The interest in this trap was emphasized by oil-shows in Paleocene sands in surrounding wells.

OPERATIONS AND RESULTS

Wildcat well 16/5-1 was spudded with the semi-submersible installation Pentagone 81 on 17 January 1971 and drilled to TD at 1943 m in granitic basement rocks. The well was drilled using seawater-based mud.

The Paleocene sands, which were the main objective of the Vali well, were not present. A thin Cretaceous series was found directly overlaying Caledonian basement rocks. From 1923 m to TD the well penetrated migmatitic granite, highly fractured and slightly weathered down to 1940 m. No shows were recorded, only background gas of C1 from1% to 3 % while drilling the tertiary series. The only reservoirs encountered in Vali well were 164 m net sand in the sand-shale sequence in the Utsira Formation from 754 m to 1012 m. These sands, very fine to medium and shelly, have very high porosity, more than 32 %. However, they are not sufficiently buried to form a trap and they were water wet. Two cores were cut: the first from 1573 to 1584 m in the Sele and Lista Formations, 15 m below the cinerites, and the second from 1929 to 1943 m in the basement rocks. No fluid samples were attempted. The well was permanently abandoned as a dry well on 8 February 1971.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 16/5-1