

Wellbore History

GENERAL

Well 34/8-6 was designed to drill North of the Visund Field on a northerly trending arm of the Tampen Spur. The main structural feature in block 34/8, the A-structure, is a NNE-SSW oriented elongated rotated fault block with pre-Cretaceous strata dipping towards the WNW. The block contains the Visund field, and is divided into two compartments, the A-south and the A-north, by a central fault. The well will test a stratigraphic trap on the northwest flank of the A-structure. From seismic anomalies possible shallow gas was expected at 510 m, 544 m, 556 m, and 877 m. Levels at 544 m, and 556 m are dipping sand layers, and could contain gas with overpressure. Scattered boulders could be expected between 424and 540 m.

The primary objective for well 34/8-6 was to test the presence of a hydrocarbon-bearing sand within the Upper Jurassic Draupne Formation, and was drilled close to the thickest portion of the interpreted turbidite sand. Secondary objectives were to drill through the Brent Group to yield more information about development and thickness control down dip of the structural crest, and to tag top of the Dunlin Group to permit a good seismic tie-in, which can be carried up dip towards the Visund reservoir.

OPERATIONS AND RESULTS

Wildcat well 34/8-6 was spudded with the semi-submersible installation Transocean 8 on 21 September 1991 and at a depth of 3950 m in the Early Jurassic Drake Formation. The well was drilled with spud mud down to 1235 m and with KCl mud from 1235 m to TD. Drilling went on without any significant problems. Shallow gas indications were encountered during drilling of the 8 1/2" pilot hole at 541 m and 550 m, but caused no problems, and no gas was observed at the wellhead during drilling operations. The gas indications did not correspond with any of the predicted sand layers.

There was no sandstone developed at the primary objective in the Draupne Formation. Crude oil appeared in the mud after penetrating a thin (1 m) limestone at 3180 m in the Kyrre Formation. Oil was seen in the mud down to 3500 m, but it was believed that it all came from the limestone at 3180 m. One core was cut in the Draupne Formation from 3572 m to 3584 m. Two runs of sidewall cores were attempted whereof 19 were recovered. The well was permanently abandoned on 3 November 1991 as a dry hole with hydrocarbon shows.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 34/8-6