



## Wellbore History

### GENERAL

Wildcat well 24/6-1 was drilled on a structure due west of the Heimdal discovery and approximately 1.5 km east of the UK-Norwegian median line. The purpose of the well was to test superimposed prospects: Paleocene Heimdal sands, which exhibited a large structural high, and middle Jurassic Vestland Group sandstones on an intra-basin high faulted panel, dipping to the west and bounded to the north, east, and south by normal faults.

### OPERATIONS AND RESULTS

Wildcat well 24/6-1 was spudded with the semi-submersible installation Zapata Ugland on 9 February 1985 and drilled to TD at 4937 m in Early Jurassic sediments of the Statfjord Formation. Some problems were experienced while cutting core no 2, due to weak formation below the 9 5/8" shoe. The hole was plugged back to 4460 m, and a cement squeeze was performed. This turned out to be not entirely successful, and the hole was drilled to 4540 m where a 7" liner was set. Further drilling proceeded without problems. The well was drilled with bentonite/polymer/lignosulphonate above 2820 m and with oil based mud from 2820 m to TD

The thick Palaeocene sands were found water bearing. The Turonian series (Tryggvason Formation) contained gas bearing limestone reservoirs, which proved to be tight. Top of the Middle Jurassic Hugin reservoir came in at 4478 m. It held a 100 m gas/condensate column with the gas/water contact at 4578 m. Five conventional cores were cut over the Heimdal Formation and Hugin Formation sandstones. Five RFT fluid samples were taken in the Hugin Formation at 4514.3 (gas + trace condensate), 4512 m (gas + trace condensate), 4787.5 m (mud filtrate), 4706 m (contaminated formation water), and at 4592 m (formation water). All samples showed unusual high oil filtrate recovery due to unexpected deep invasion by the oil base mud.

The well was permanently abandoned on 25 August 1985 as a gas/condensate discovery.

### TESTING

One drill stem test was performed in the interval 4502 m to 4537 m. It flowed 422000 Sm3 gas with 72 Sm3 condensate /day on a 20/64" choke. The gas/condensate ratio was 5890 sm3/sm3 with a condensate gravity of 48.8 deg API.

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 24/6-1