



Wellbore History

GENERAL

The well is located on the Gjallar Ridge, on a local horst within a major top Cretaceous four-way dip closure. The main purpose of well 6704/12-1 was to test the petroleum potential of the Upper Cretaceous section. In addition to the primary objective, the well was designed to test the petroleum potential of the possible sandy Eocene section above the main target

OPERATIONS AND RESULTS

Wildcat well 6704/12-1 was spudded with the semi-submersible installation "Scarabeo 5" in 1352 m water depth on 4 June 1999 and drilled to TD at 4103 m in the late Cretaceous Nise Formation. Due to problems with the positioning system the well was spudded a little over 108 m to the Northeast off the planned spud point, and a correction run was necessary to correct the well path. The well was initially planned as a vertical well, but was consequently built to 11 deg. in top Cretaceous and dropped to 5 deg. towards TD. The well was drilled water based with seawater and bentonite down to 2167 m and AQUA-DRILL mud with Glycol additives (AQUA-COL) from 2167 m to TD. The 12 1/4 pilot hole from seabed to 2126 m was drilled with a full suite MWD plus sonic to detect water or gas flows, and give information on silicate ooze sediment formations and establish setting depth for the 20" casing. The much debated ooze section proved to be about 640 m thick and was drilled without problems. Only thin sand stringers were present in the top of the Eocene-50 section. The Early Tertiary section consists of siltstones and shaly-silty dirty sandstones. The reservoir quality of the Latest Campanian sandstones below the top Cretaceous unconformity was excellent. Two thin intrusions were present at approx. 3500 m RKB. One core was cut across the Tertiary-Cretaceous boundary from 2554 to 2575 m, a second from 2997 to 3006 m in the Springar Formation and a third from 4097 to 4103 (TD) in the Nise Formation. A number of MDT samples from 3842.6 were all highly contaminated with mud. The well was permanently plugged and abandoned as a dry hole on 24 July 1999.

TESTING

No DST was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6704/12-1