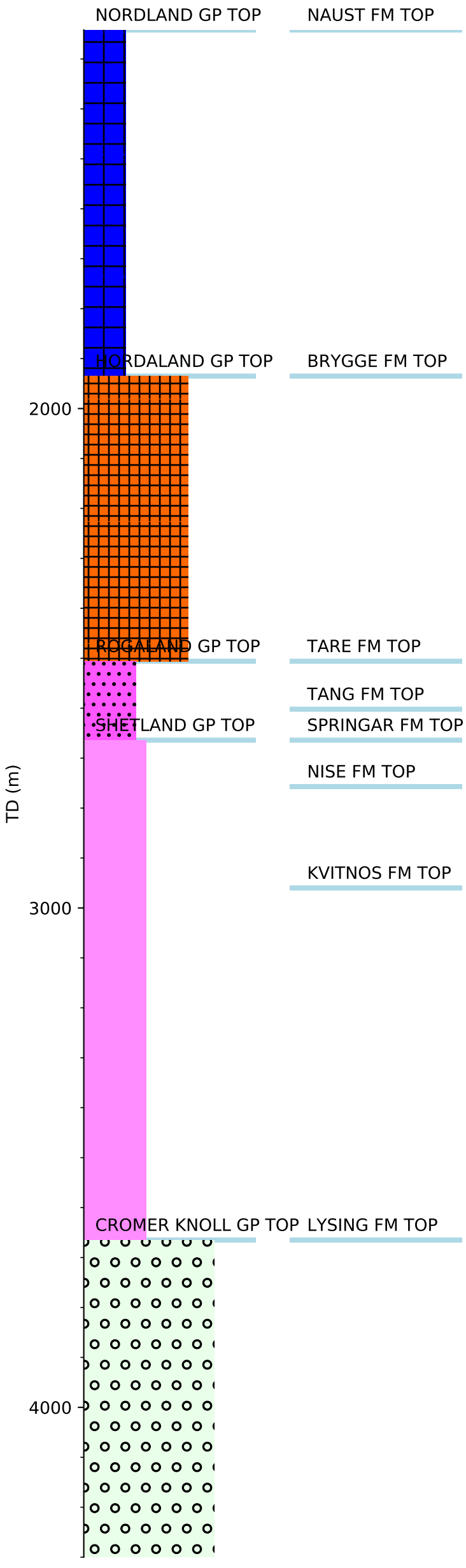


## Wellbore History

GENERAL

Wildcat well 6405/7-1 was drilled in 1206 m water depth on the Grip High, ca 75 km due north of the Ormen Lange Field in the Norwegian Sea. The primary target was the Nise Formation of Campanian age. Secondary targets were the Lysing Formation of Coniacian age and a Danian lead, the Egga Member Equivalent. In addition, understanding of a mapped flat event was a main objective for this well.

OPERATIONS AND RESULTS

Well 6405/7-1 was spudded with the dynamically positioned drill ship West Navigator on 21 June 2003 and drilled to TD at 4300 m in the Late Cretaceous Lysing Formation. In the 12 1/4" several incidents with high gas levels and also gain in the active system were recorded and responded to. In the end the mud weight had been increased from initially 1,33 g/cm3 when drilling to core point at 2816 m, to 1,42 g/cm3 prior to pulling out of the hole. The decision was made to plug back the 12 1/4" hole and initiate a technical side track (T2) with an 11 3/4" liner set above top of the reservoir. When the well was at TD and the discovery confirmed quality MWD data from the 26" section interval had to be collected. To obtain this a new 8 1/2" hole was drilled 15 m from the original hole from seafloor to 1920 m using LWD in one derrick, while performing wire line logging in the other. The well was drilled with seawater and hi-vis pills down to 1910 m and with Glydril DW (water based KCl/NaCl/Glycol/MEG/polymer) from 1910 m to TD. The post-TD 8 1/2" hole for MWD logging was drilled with seawater and hi-vis sweeps.

The primary target, the Nise Formation, 2757 m to 2816 m in well 6405/7-1 and 2760.6 m to 2960 m in 6405/7-1T2, consists of layered/laminated and bioturbated claystones, siltstones and sandstones with poor reservoir quality. The Nise formation proved to be oil-bearing from the top at 2760.5 m and down to 2823 m. However, good oil shows are also described below this depth, to the base of the deepest core at 2881 m and on SWCs down to 2892 m. Oil samples were collected from wire line testing tool at 2763 m, 2770.5 m and 2828 m. Water samples were taken with wire line testing tool at 2828 m and 2850 m. The secondary target, the Lysing Formation, was encountered at 3665 m. The base of the Lysing Formation was not seen. The reservoir properties were poor. It consisted of highly bioturbated, very fine to fine grained sandstones, siltstones and claystones. Quartz cementation is common. The Lysing sands were water wet. No samples were taken due to tight formation. Five cores were cut in the interval 2754 m - 2881 m and two cores were cut in the interval 3751 m to 3784 m. All cores were cut in the T2 track.

The well was permanently abandoned on 15 October 2003 as an oil discovery

TESTING

A drill stem test was performed from the interval 2758 m - 2811.7 m. The production rate from the test was 40 m3 oil/day, with a GOR of 175 m3/m3. Stock tank oil density was measured to 868 kg/m3 (31 deg API). Geochemical analyses show that the oil contain relatively low-mature biomarkers from a post Jurassic source rock, but there may be several populations of oils in the reservoir.

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6405/7-1