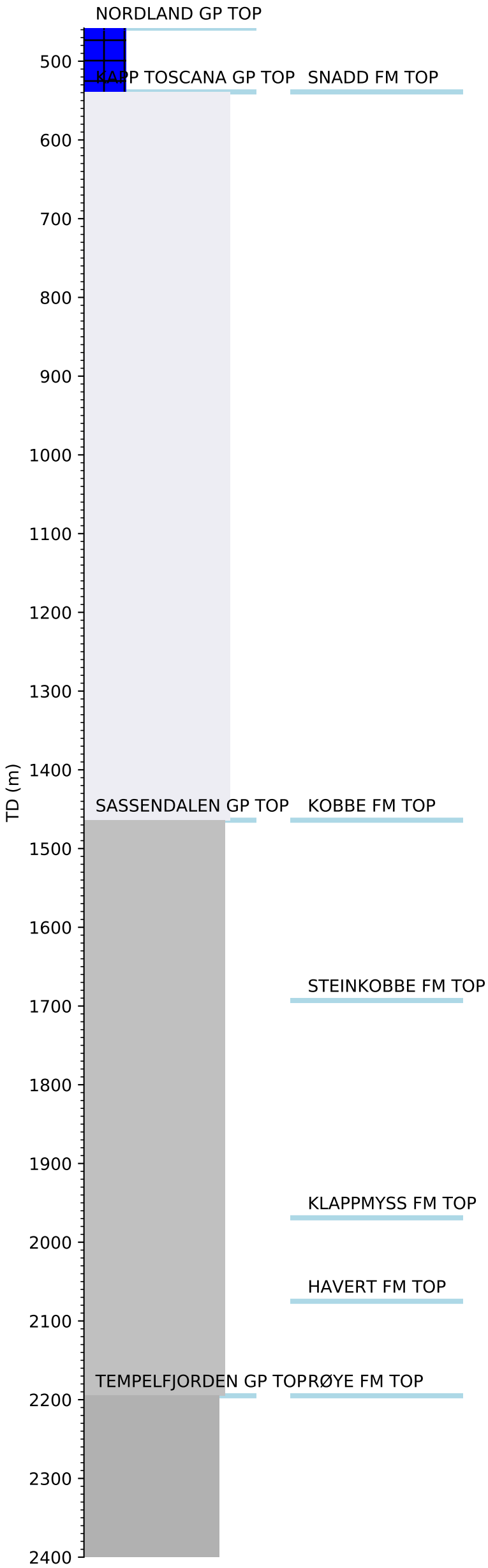
Groups

Formation Tops



Wellbore History

Wellbore history

GENERAL

Well 7222/1-1 was drilled to test the Aurelia prospect on the northern part of the Loppa High in the Barents Sea. The objective was to prove hydrocarbons in the Triassic Snadd and Kobbe formations, and to test the prospectivity of the Early Permian Ørn Formation.

OPERATIONS AND RESULTS

Wildcat well 7222/1-1 was spudded with the semi-submersible installation Scarabeo 8 on 14 June 2016. During coring at 1479.5 m, the string stalled and mud losses at 45 m3/hr occurred, resulting in a very short core and time spent on curing the mud losses. TD was set at 2400 m in the Late Permian Røye Formation, which was earlier than planned, due to slow drilling and several bit trips in massive chert. The well was drilled with seawater and hi-vis sweeps down to 737 m and with EMS-400 oil based mud from 737 m to TD.

The Carnian age reservoir in the Snadd Formation was penetrated at 1015m, and found to be water bearing. The sequence had a gross thickness of 115 m, and a net sand of 44.3 m, giving a net to gross value of 38.6%. Porosity of 22% was calculated for this reservoir zone, with dry gas shows observed. The Ladinian age Snadd reservoir was penetrated at 1181 m, and found to be water bearing. The reservoir zone had a gross thickness of 24.6 m, net sand of 15.5 m giving a net-to-gross value of 63.1%. Porosity of 18% was calculated, and as with the Snadd reservoir, dry gas shows were observed. Top Kobbe Formation reservoir was penetrated at 1464 m. The reservoir sandstone had a thickness of 33 m, and was found to be tight and water bearing. Calculated porosity was 12.5%, with very low permeability, as confirmed from the recovered core. The Steinkobbe Formation, an important Triassic age source rock for oil and gas in the Barents Sea, was penetrated in this well, from 1693 to 1969 m. The Late Permian Røye Formation was found to consist of tight, water-bearing carbonates.

Weak oil shows and wet gas were described on sandstone cuttings from the interval 1478 to 1522 m in the upper part of the Kobbe Formation.

One short core was cut from 1478 to 1479.53 m in the upper part of the Kobbe Formation. No fluid sample was taken.

The well was permanently abandoned on 2 August 2016 as a dry well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7222/1-1