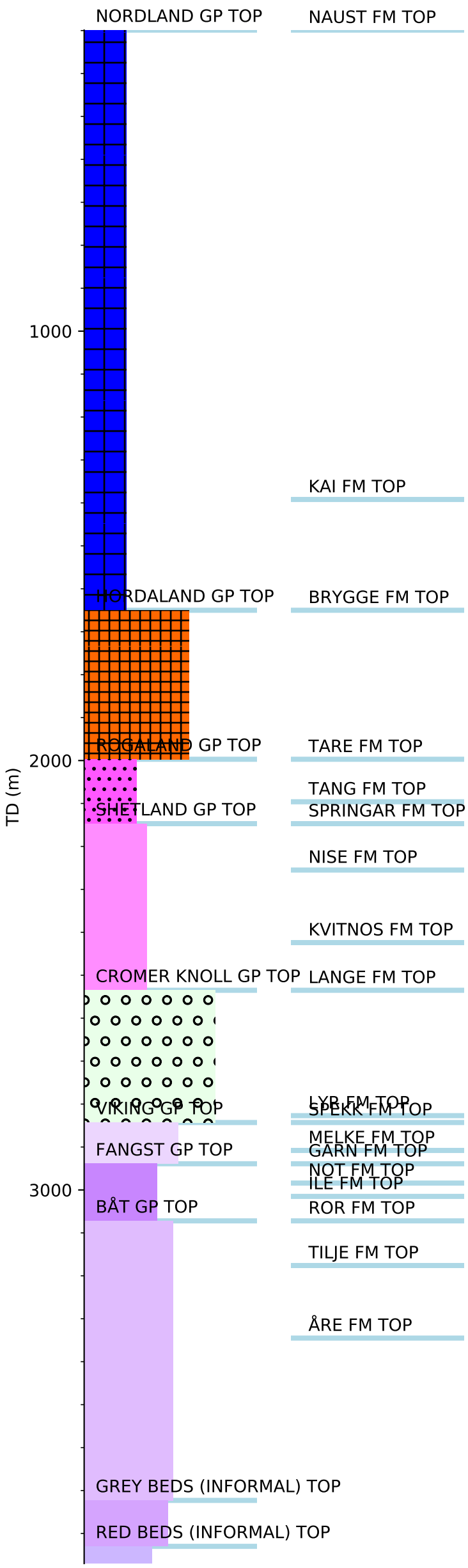

Wellbore History

GENERAL

Wildcat well 6407/2-1 was drilled in the MØre-TrØndelag II area offshore Mid-Norway, approximately 215 km NW of Trondheim. The overall goal with this early well was to establish the total stratigraphic column down to Late Triassic. The primary targets were Middle and the Early Jurassic Sandstone units. Secondary targets were the sequence below the Top Palaeocene reflector, the Early Cretaceous sequence, which could show development of sand, and the Triassic sandstones/si1tstones immediately below the Åre Formation.

The well is Type Well for the Spekk and Ror Formations.

OPERATIONS AND RESULTS

Well 6407/2-1 was spudded with the semi-submersible installation West Venture on 3 June 1982 and drilled to TD at 3870 m, 40 into the Late Triassic Red Beds. Operations went without significant problems. The well was drilled with spud mud down to 409 m. The 26" section was first drilled as a 14 3/3" pilot hole from 409 m to 1013 m using gel/gypsum mud. At this point 30 bbl of diesel was added to reduce mud weight. The hole section was then opened up with a 26" underreamer using gel/gypsum mud with further diesel addition. The 17 1/2 section was drilled with polymer/gypsum/lignosulphonate from 1013 m to 2215 m, and the remaining well was drilled with a lignite/lignosulphonate mud down to TD.

The well proved mainly claystones down to Middle and Early Jurassic Sandstones. The Tertiary with a total thickness of 1848.5 m, rested unconformably on the Late Cretaceous where the topmost Maastrichtian was missing. Otherwise the Cretaceous section was nearly complete, and relatively thick (ca 700 m) compared to other wells in the area. High gas readings were experienced in the upper part of the Cretaceous (Santonian - Campanian) with weak oil shows on cuttings and two SWCs. A study of wire line logs, sidewall cores and hole response indicated that the gas was overpressured, and trapped in a non-reservoir lithology. The base Cretaceous unconformity (base Lyr Formation) was penetrated at 2842.5 m, overlying a 65.5 m thick Jurassic shale sequence similar to the Kimmeridgian Clay Formation (Spekk Formation). The two Jurassic Sandstone units were 133 m (Fangst Group) and 169 m (Tilje Formation) thick. In contrast to what is seen in the other wells in the area, the upper unit contains a shaly sequence of about 30 m thickness. A "Coal Unit" (Åre Formation) of 378 m thickness, mainly composed of interbedded carbonaceous claystone/shale, fine sand and silt, overlies the Triassic Grey and Red beds.

Six conventional cores were cut, one in the Late Cretaceous, two in the Fangst Group, one in the Ror Formation and two in the Åre Formation Coal Unit, with a total recovery of 66.11 m. No fluid sample was taken.

The well was permanently abandoned on 6 August 1982 as a well with shows.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6407/2-1