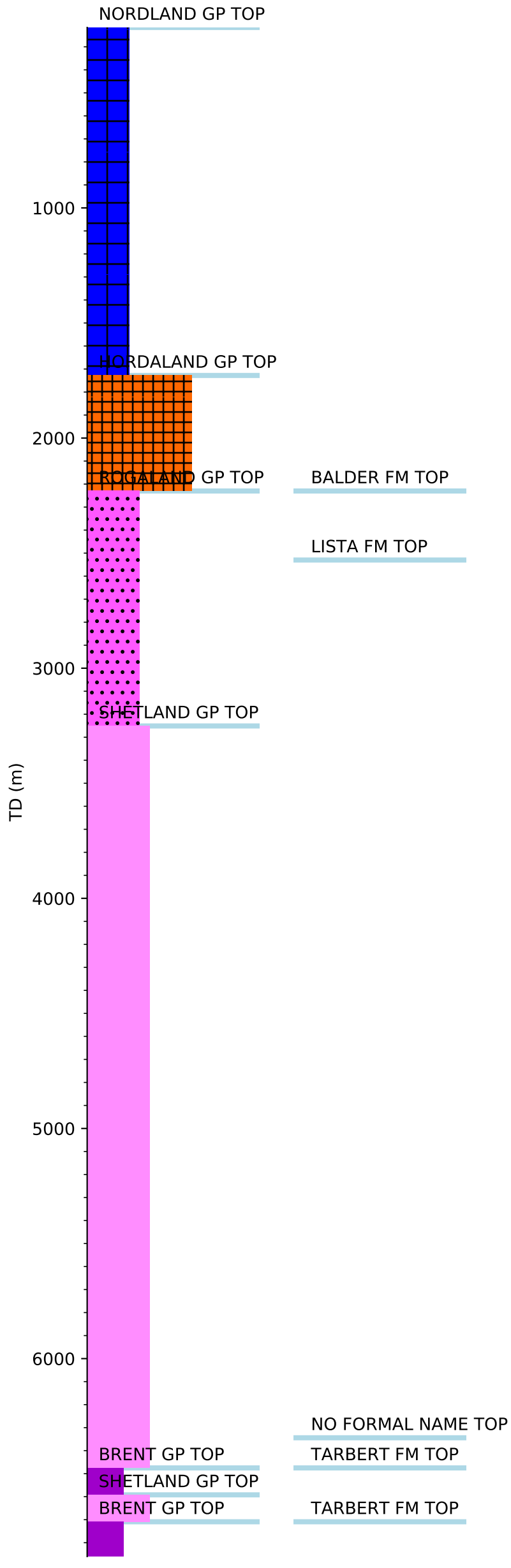
Groups

Formation Tops



Wellbore History

p>GENERAL

Well 34/10-46 A was drilled to a structure 5 km southwest of the Gullfaks field. Due to a water-filled Statfjord Formation in segment D1 in well 34/10-46 S, it was decided to drill a side track, 34/10-46 A to the Brent Group prospect D1. The objectives of the well were to prove oil in a Cretaceous/Brent Group prospect in D1 and to be a water injector in Tarbert Formation.

OPERATIONS

The wildcat well 34/10-46 A was spudded on 2 February 2002 from the permanent installation Gullfaks A and drilled to TD at 6860 m (2105,5 m TVD RKB) in the late Cretaceous Shetland Group. The well was drilled with OBM to TD.

Kick-off point was at 3930 m (1667 m TVD MSL). In well 34/10-46 S/46 A/46 B the Brent Group in segment E1 and the Statfjord Formation in segment D1 were reached by the 12 1/4" section. At 6344 m (1920 m TVD MSL, 5 m deeper than prognosed) a gas-filled, pressure-depleted sandstone was encountered. A loss situation arose when drilling out of the sandstone and casing was set close to the top sandstone. From 6401 m to TD the well encountered Shetland shale three times and the Tarbert Formation twice.

The well missed the geological target (40 m to the west of target) and drilled too close to the western edge of the structure. This has resulted in a large uncertainty concerning the age of the uppermost sandstone between 6344 m and 6401 m. The most likely interpretation of the section is Cretaceous age. The well proved a gas column of 20 m in this sandstone (Krans Member/Kyrre Formation) and an oil column of 2 m in the Brent Group. Neither the gas-oil contact nor the oil-water contact was identified due to shale lithology at the respective depths.

The MDT measurements in the Cretaceous sandstones penetrated in 46 A show a pore pressure corresponding to ~1,36 sg EMW, as indicated by pressure prognosis given prior to drilling.

No fluid samples were collected and no coring was performed in the well.

Running the liner in well 34/10-46 A failed due to restrictions in the hole, and the well was plugged back to the 9 5/8" shoe. Pulled out of hole with cement stringer on 16 March 2002 and the well was re-classed to development well 34/10-A-48 A.

TESTING

Testing

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 34/10-46 A