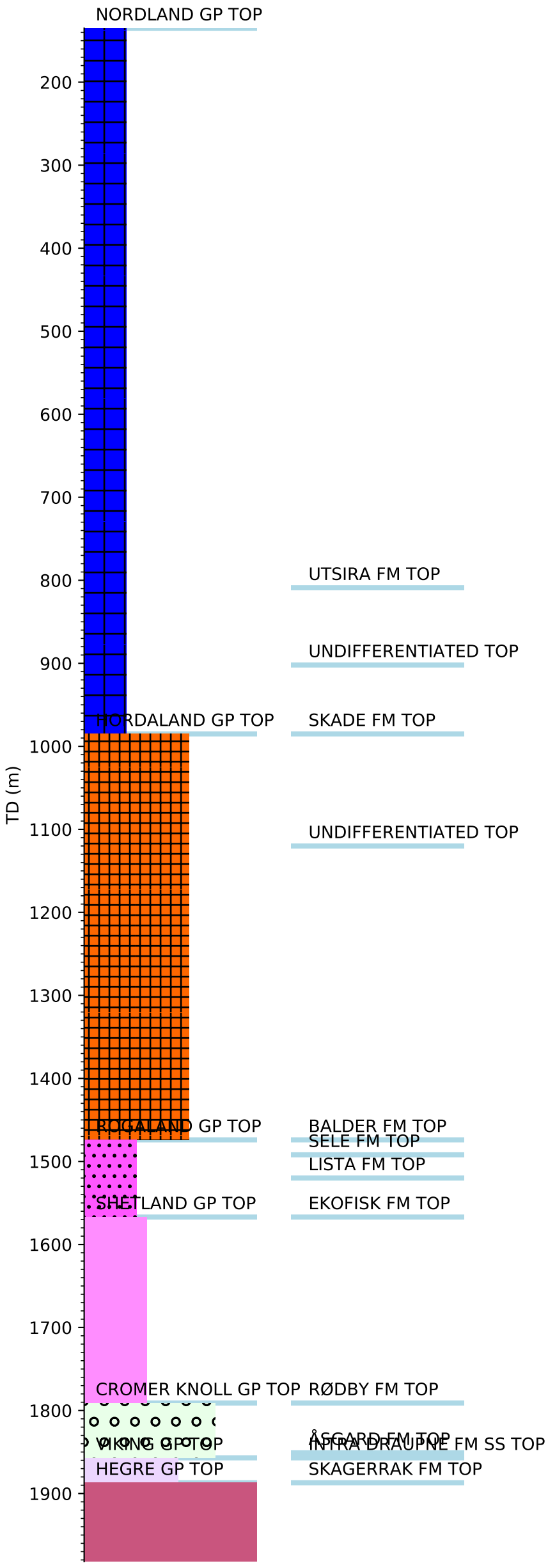
## Groups

## Formation Tops




## Wellbore History

GENERAL

Well 16/2-14 was drilled on the Espeværhøgda prospect on the Johan Sverdrup Field on the Utsira High. The main objective was to investigate the reservoir thickness, quality and facies near the crest of the whole Johan Sverdrup structure. The secondary objective was to acquire data in the overburden for field development decisions and planning of future production and injection wells at Johan Sverdrup Field. A third objective was to investigate reservoir presence in the Triassic section (Hegre Group). The fourth objective was to investigate the reservoir quality of the Shetland Group chalk (Ekofisk/Tor Formation).

OPERATIONS AND RESULTS

A pilot hole 16/2-U-14 was drilled 30 m south of the main wellbore location to aid in picking core points in the overburden. Appraisal well 16/2-14 was spudded with the semi-submersible installation Ocean Vanguard on 14 September 2012 and drilled to 1210 m where a fish was lost in hole. The hole was cemented back and it was decided to set the 13 3/8 casing shoe. Well 16/2-14 T2 was sidetracked from 16/2-14 below the 13 3/8" casing shoe at 1171 m and drilled to TD at 1982 m in the Triassic Skagerrak Formation. The well was drilled with Seawater down to 608 m and with oil based XP-07 mud from 608 m to TD.

Good oil shows were recorded at top Ekofisk level from 1565 to 1570 m. Weak shows (from OBM?) were recorded in the Ekofisk chalk from 1570 to 1733 m. The well encountered the target Late Jurassic reservoir sand 18 m deep to prognosis, at 1856 m. The reservoir showed good reservoir properties and contained oil. Top Triassic, the tertiary objective, came in at 1886 m, 11 m deeper than prognosed. There were no shows on the core from the Triassic section (core 7).

Seven cores were cut. Core 1 was cut from 811 to 820 m in Utsira Formation sandstone, core 2 was cut from 987 to 996 m in Skade Formation sandstone, and core 3 was cut from 1067 to 1076 m in undifferentiated Hordaland Group sandstone and core 4 was cut from 1539 to 1548 m in the Lista Formation mudstone.  Cores 5 to 7 were cut in succession from 1836 to 1904.5 m, covering the interval from lowermost Cretaceous, through the whole reservoir section, and 16 m into the Triassic. MDT water samples were taken at 820.05 m, 820.53 m and 820.98 m in the Utsira Formation and at 1116.53 m in undifferentiated sandstone in the Hordaland Group. Oil samples were taken at 1858 m in the Late Jurassic reservoir sandstone. Fifteen percent contamination of the sampled fluid was estimated.

The well was permanently abandoned on 17 November 2012 as an oil appraisal.

TESTING

Injection tests were performed in the plug and abandon phase.

# LITHOSTRATIGRAPHY & HISTORY FOR WELL: 16/2-14