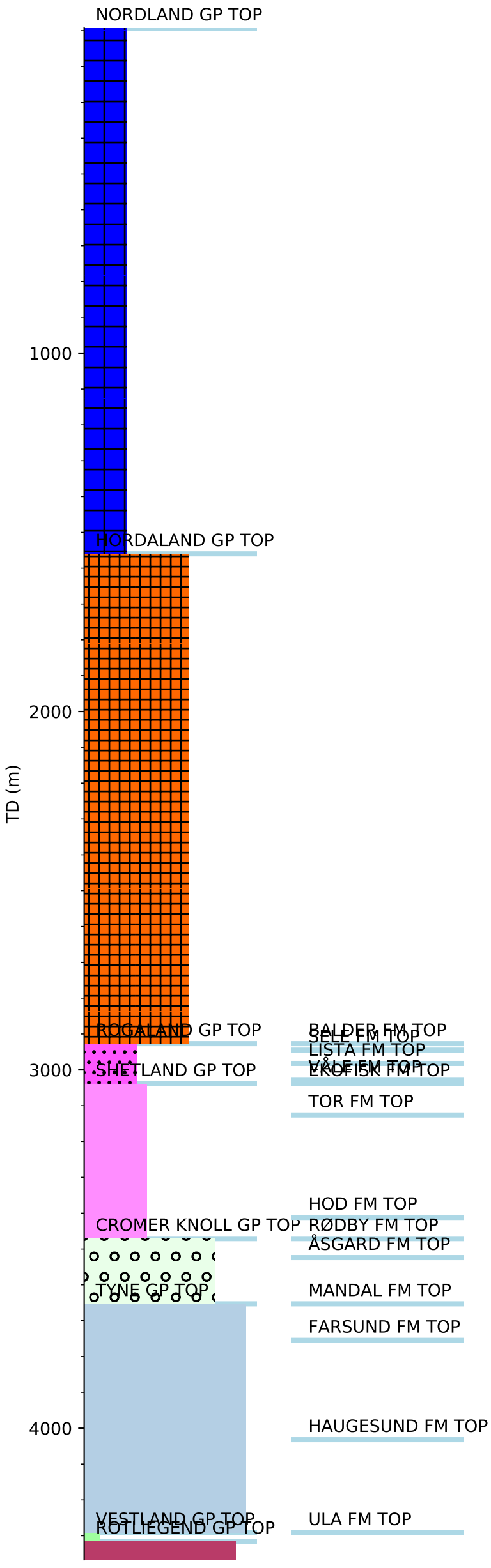
Groups

Formation Tops



Wellbore History

GENERAL

Well 2/9-2is located on the Piggvar Terrace in the southern North Sea. The primary objective was to test a broad structural closure where Jurassic Sands were postulated to be present along the narrow intermediate zone between the Mandal High to the east and the Central Graben to the west.

OPERATIONS AND RESULTS

Wildcat well 2/9-2 was spudded with the semi-submersible installation Dyvi Alpha on 7 July 1979 and drilled to TD at 4367 m in the Early Permian Rotliegend Group. The well was drilled without significant problems. However, four days were spent on retrieving the wear bushing prior to running the 13 3/8-inch casing. The well was drilled to 1513 meters using seawater, spotting high viscous gel pills occasionally while drilling and upon completion of each hole interval. A weighted Gypsum-polymer mud was used below this depth to TD.

The Late Jurassic was encountered at 3653 m, 16 m low to prognosis, confirming the structural interpretation. The Late Jurassic section (3653-4293 m) consisted of 640 meters of predominantly black shale with no sands and was age-dated Middle Kimmeridgian-Portlandian. No Jurassic rocks older than Middle Kimmeridgian were found. From 4290-4325 m, the section was silty and sandy but impermeable. From 4325 m to TD lithology was interpreted to be weathered volcanics of possibly Permian age, with caved Kimmeridgian shales. Stratigraphic and petrophysical data pertinent to further evaluation of the Jurassic zone was secured through the acquisition of one conventional core and an almost complete set of open hole logs. Poor to very poor shows were seen in the intervals 4135 - 4155 m and 4160 - 4182.5 m in the Late Jurassic. They were described as 0-15% dull yellow fluorescence, slow streaming, low intensity, blue-white cut.

One conventional core was cut in the Late Jurassic from 3897 - 3916 m with 100% recovery. Sidewall coring was abandoned as the tool became stuck in the hole at 3460 m. No wire line pressure points or fluid samples were taken.

The well was permanently abandoned on 4 September 1979 as a dry well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 2/9-2