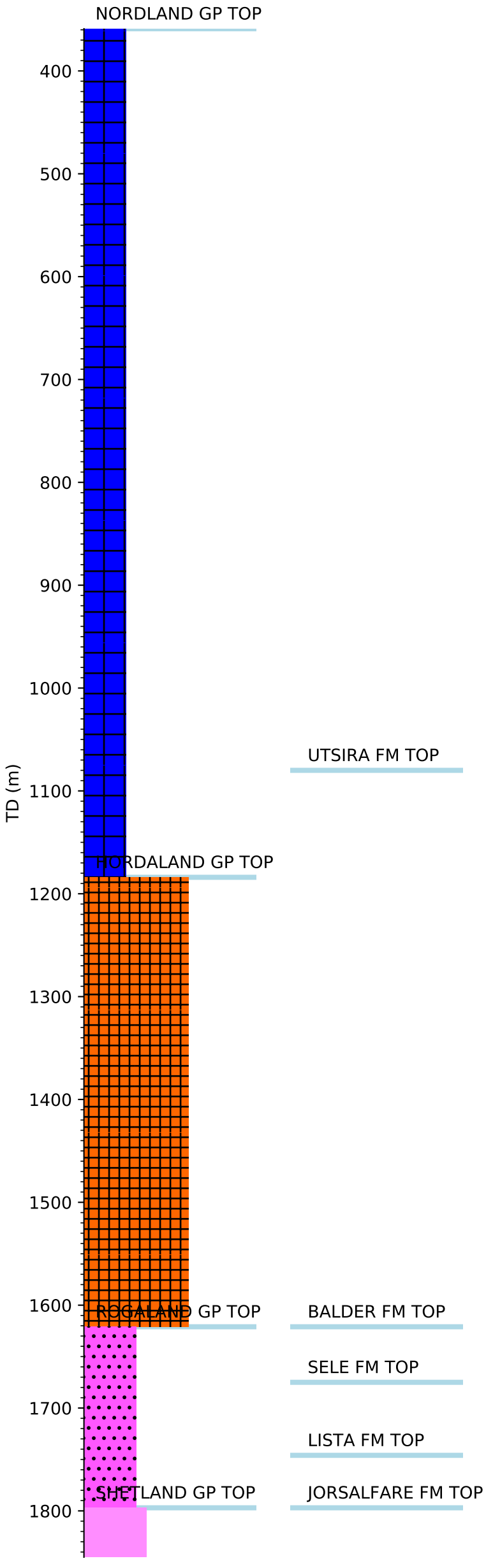
Groups

Formation Tops



Wellbore History

GENERAL

Well 33/6-4 was drilled on the Penguin Ridge between the Makrell Horst and the Marulk Basin in the Northern North Sea. The objective was to test the Kakelborg prospect, an intra-Lista Formation sandstone reservoir interpreted as fan deposits of a channel system prograding from the west across the East Shetland Basin. The fan deposits were supported by an AVO-class III anomaly response.

OPERATIONS AND RESULTS

Wildcat well 33/6-4 was spudded with the semi-submersible installation Borgland Dolphin on 6 July 2012 and drilled to TD at 1845 m in the Late Cretaceous Jorsalfare Formation. A 9 7/8” pilot hole was drilled from TD in 36” section at 425 m to 650 m to check for shallow gas. No shallow gas was seen. The well was drilled with seawater and sweeps down to 650 m and with Aqua-Drill glycol mud from 650 m to TD.

The Lista Formation was encountered at 1746 m, 6 m shallow to prognosis. The Intra-Lista Formation sandstones were not present and no hydrocarbon shows or anomalous gas values seen when penetrating the Lista Formation. The AVO response observed in the seismic dataset was interpreted as the result of an interference effect where two class IV responses (a hard basal-Lista shale in combination a hard Top Shetland) generated an AVO-class III anomaly. The anomalous seismic response is not observed in any of the neighbouring wells.

Due to lack of reservoir and no shows of hydrocarbons, the logging was limited to LWD and VSP on wireline. No cores were cut and no wire line fluid samples were taken.

The well was permanently abandoned on 3 August 2014 as a dry well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 33/6-4