Formation Tops Groups NORDLAND GP TOP 200 300 400 500 600 700 **UTSIRA FM TOP** 800 RDALAND GP TOP 900 SKADE FM TOP 1000 1100 D GP TOP 1200 1300 TD (m) 1400 1500 1600 **GRID FM TOP** 1700 1800 1900 2000 **BALDER FM TOP GP TOP** SELE FM TOP 2100 LISTA FM TOP 2200 **HEIMDAL FM TOP** LISTA FM TOP 2300 VÅLE FM TOP **CRO**MER KNOLL GP TOP ÅSGARD FM TOP MKING GPTOP DRAUPNE FM TOP 2400 HEATHER FM TOP **HEGRE GP TOP** 2500 2600

Wellbore History

GENERAL

Well 16/1-22 S was drilled to appraise the Ivar Aasen Field on the Gudrun Terrace in the North Sea. The primary objective was to test the hydrocarbon potential in the Sleipner and Skagerrak Formations in the southwestern part of the Ivar Aasen Field and to establish hydrocarbon fluid contacts.

OPERATIONS AND RESULTS

Appraisal well 16/1-22 S was spudded with the jack-up installation Mærsk Interceptor on 24 April 2015 and drilled to TD at 2640 m in the Late Triassic Skagerrak Formation. No significant problem was encountered in the operations. The well was drilled with seawater and bentonite sweeps down to 600 m, with Versatec oil based mud from 600 m to TD. Good hydrocarbon shows were recorded in the sandy sections in the cores from 2503 to 2550 m.

The Jurassic - Triassic sequence was different from the expected as the Jurassic consisted of the Viking Group only, with no Jurassic reservoir present. This was however partly compensated by a thicker Triassic reservoir sequence with good quality sandstone in the uppermost part. Top Skagerrak Formation was encountered at 2506 m, which was 28 m deeper than the prognosis. The total reservoir thickness was 9 m thinner than expected. The Skagerrak Formation had moveable oil in the top three meters down to an ODT at 2508.3 m (2486 m TVD).

Two cores were cut in this well. Core 1 was cut from 2502.8 to 2517.66 m with 93.14% recovery, and core 2 was cut from 2517.66 to 2550 m with 100% recovery. A small depth shift relative to the logs (-0.1 to -0.4 m) is estimated for core 1. For Core 2 there was no core-log depth shift. MDT fluid samples were taken at 2506.15 (oil) and 2524.03 m (water) fluid.

The well was plugged back for sidetracking on 27 May 2015. It is classified as an oil appraisal well.

TESTING

No drill stem test was performed.