Formation Tops Groups NORDLAND GP TOP 200 300 400 500 600 **UTSIRA FM TOP** 700 800 900 TD (m) 1000 RDALAND GP TOP SKADE FM TOP 1100 1200 1300 1400 1500 1600 **GP TOP BALDER FM TOP** 1700 EPETE FINITOP HEIMDAL FM TOP LISTA FM TOP 1800 #BOFF#FMHTAPTOP SHETLAND GP TOP

Wellbore History

GENERAL

Well 25/8-18 S was drilled to appraise the 25/8-4 Hedila discovery on the Utsira High, east of the Ringhorne and Grane Fields in the North Sea. The primary objective was to test the Hydrocarbon potential in Lower Heimdal sands. Secondary objective was to test the upper Heimdal Formation, in a structurally high location.

OPERATIONS AND RESULTS

Appraisal well 25/8-18 S was spudded with the semi-submersible installation Transocean Leader on 29 September 2014 and drilled to TD at 1890 m in the Late Cretaceous Tor Formation. The well was drilled as a J shape well, consisting of three hole sections: 36", 17 1/2" and 12 1/4". To reach the target location, the well was drilled with an inclination of up to 11 deg in the 12 1/4 section. There were no indication of shallow gas in the well. No significant problem was encountered in the operations. The well was drilled with seawater/spud mud down to 1165 m and with XP-07 oil based mud from 1165 m to TD.

The well encountered a 25 m oil column in sandstones with good reservoir properties from top Lower Heimdal Formation at 1759.0 m (1755.5 m TVD) and down to the OWC at 1785 m (1780.5 m TVD). In addition, several thin hydrocarbon-filled stringers, interpreted as Upper Heimdal injectites, were found within the Lista Formation. The pressure points indicate a continuous oil gradient through the upper and lower sands, inferring vertical communication between the Upper- and Lower Heimdal Formation. Additionally, the well found a gas-filled sand stringer at 1704 to 1707 m within the Balder Formation. Hydrocarbon shows were seen only inn association with the hydrocarbon-filled intervals.

Two 27 m cores were cut from 1737.5 to 1792 m in the Heimdal Formation, covering the thinner injectite sandstones of the Upper Heimdal Formation, and the transition into the thick sandstone unit of the Lower Heimdal Formation. The last 5.6 m of the first core was lost, due to a failure of the full closure catcher system. Sampling and pressure points were sampled on wireline in the interval from 1706 to 1796 m. Oil was samples at 1760 m in the Heimdal Formation, and gas was sampled in the Balder Formation at 1706.1 m. The samples contained less than 1% mud contamination. Geochemical analyses of the Balder sample showed a biodegraded gas with characteristic heavy carbon-13 isotopes in propane. The Heimdal oil sample is indicated to be a mix of earlier biodegraded oil and fresh, non-degraded oil.

The well was permanently abandoned on 23 October as an oil and gas appraisal well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 25/8-18 S