Formation Tops Wellbore History Groups NORDLAND GP TOP **GENERAL** Well 30/9-18 is located on the Bjørgvin Arch south of the Oseberg Sør Field and North of the 30/9-16 K Oseberg Sør Discovery. This is in the Northern North Sea. The well was drilled to clarify the Oseberg Sør development strategy. The primary objective was to establish the extent of the high-permeability Tarbert reservoir found in well 30/9-16. Secondary objectives were to test the lower Brent Group, the Cook Formation, and the Statfjord Formation. **OPERATIONS AND RESULTS UTSIRA FM TOP** Well 30/9-18 was spudded with the semi-submersible installation Treasure **UNDIFFERENTIATED TOP** Saga on 14 March 1995 and drilled to TD at 2994 m in the Late Jurassic Drake Formation. The 24" hole was drilled from 193 m MD to 557 m MD. <mark>HO</mark>RDALAND GP TOP Shallow gas was predicted at 590 m MD. The 18 5/8" casing was set at 547 m MD. As the cement was displaced bubbles from the hole was observed indicating shallow gas. Displaced out the entire cement volume and filled the annulus with 1.3 sg mud. Mixed and pumped gas block cement SKAPE EMETOPIATED TOP around. The well was drilled with spud mud down to 557 m and with 1000 KCl/polymer mud from 557 m to TD. NO FORMAL NAME TOP Formation tops in the Tertiary and Jurassic sections came in slightly higher than prognosed. However, they were within the prognosed UNDIFFERENTIATED TOP uncertainty range. The well penetrated the Brent Group reservoir zones and they were water bearing. Very weak oil shows were reported in the NO FORMAL NAME TOP interval 2640 to 2780 m in the Heather/Tarbert intervals during drilling. Intra Heather Sandstone and Tarbert Formation combined UNDIFFERENTIATED TOP contained 127 m gross sand (67.5 m net). The Ness Formation was 195 m thick with 54.5 m net sand. The Cook and Statfjord Formations were not **GRID FM TOP** drilled. RFT formation pressures gave three distinct and separate water gradients, one covering the Intra Heather sandstone/Tarbert Formation NO FORMAL NAME TOP and two separate gradients covering the Ness Fm. The three water TD (m) gradients indicated that there was possibly no pressure communication between the three zones. No cores were cut and no wire line fluid samples were taken. The well was permanently abandoned on as a dry well. **TESTING** No drill stem test was performed. GALAND GP TOP **BALDER FM TOP SELE FM TOP** LISTA FM TOP MARDRADEPM TOP **SHET**LAND GP TOP UNDIFFERENTIATED TOP **CROMER KNOLL GP TOP RØDBY FM TOP** PRACHEMETEM TOP INTRA HEATHER FM SS TOP TARBERT FM TOP PARIBROCES POS **BRENT GP TOP NESS FM TOP** PHOREE EMENTINATED TOP **DUNLIN GP TOP**

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 30/9-18