



**Wellbore History**

**GENERAL**

Well 30/6-22 was drilled on the 30/6-19 Beta Saddle Discovery between the Veslefrikk field and the 30/6-5 Oseberg East (Beta South) discovery. The discovery well 30/6-19 found oil in the Brent Group. The objectives of well 30/6-22 were to narrow the range in the oil/water contact levels in the Tarbert/Ness and the Etive/Rannoch/Oseberg Formations and to get information about lateral variation in reservoir quality.

**OPERATIONS AND RESULTS**

Appraisal well 30/6 22 was spudded 21 May 1988 by Polar Frontier Drilling semi submersible rig Polar Pioneer and drilled to TD at 3336 m in the Late Jurassic Statfjord Group. Drilling went without problems, but the prospect was intersected 50 m away from where it was decided, in north-eastern direction. The well was drilled with spud mud down to 963 m and with KCl/polymer mud from 963 m to TD.

Top Brent Group, Tarbert Formation was penetrated at 2874 m. Moveable oil was confirmed by logs, RFT pressure gradients and tests in sandstones in the Ness and Etive formations from 2908 m (2880 m TVD MSL). The OWC was not clearly defined, but indicated from RFT pressure gradients to be at 2935 m (2907 m TVD MSL). The Oseberg Formation was water bearing. The Cook Formation had good oil shows but it was tight and impossible to test. No shows were recorded in the Statfjord Formation.

Six cores were cut in the well: The Brent Group was cored in five cores in the interval 2854 - 3009.9 m and one core was cut in the Cook Formation in the interval 3122.5 - 3150.4 m. RFT-tests indicated oil from 2910 m (Ness Formation) and mud filtrate from 2934 m (Etive Formation).

The well was suspended on 13 July as an oil appraisal.

**TESTING**

Two DST tests were performed.

DST 1 tested the interval 2917.2 - 2936.2 m in the Etive Formation. It produced 294 Sm3 oil and 19430 Sm3 gas /day through a 32/64" choke. The GOR was 67 Sm3/Sm3, the oil density was 0.892 g/cm3, and the gas gravity was 0.76 (air = 1) with no measurable H2S and 4 % CO2. The maximum flowing bottom hole temperature measured at sensor point 2852.8 m was 122.9 deg C.

DST 2 tested the interval 2908.8 - 2912.3 m in the Ness Formation. It produced 480 Sm3 oil and 31680 Sm3 gas /day through a 32/64" choke. The GOR was 66 Sm3/Sm3, the oil density was 0.823 g/cm3, and the gas gravity was 0.765 (air = 1) with no measurable H2S and 4 % CO2. The maximum flowing bottom hole temperature measured at sensor point 2854.2 m was 123.7 deg C.

**LITHOSTRATIGRAPHY & HISTORY FOR WELL: 30/6-22**