Formation Tops Groups NORDLAND GP TOP **UTSIRA FM TOP** SKADE FM TOP **GRID FM TOP** FRIGG FM TOP 1000 GALAND GP TOP **BALDER FM TOP** SELE FM TOP LISTA FM TOP TY FM TOP SHETLAND GP TOP JORSALFARE FM TOP KYRRE FM TOP 2000 TD (m) TRYGGVASON FM TOP BLABOOK BNEDTOTED P CROMER KNOLL GP TOP RØDBY FM TOP 00000 **HEATHER FM TOP** ON PRINCE COP TOOP **BRENT GP TOP** TARBERT FM TOP NESS EM TOP **DUNLIN GP TOP** DRAKE FM TOP **COOK FM TOP**

STATELORD TOP

LUNDE FM TOP

Wellbore History

GENERAL

Well 35/9-6 S was drilled on the Titan Prospect on the Måløy slope in the northern North Sea close to several hydrocarbon discoveries. The most important of these are the Gjøa field to the east and Aurora and Vega to the west. The objective was to test four target levels in the Jurassic with the Tarbert and Etive formations as primary targets and Callovian Intra Heather Formation sandstone and Cook Formation sandstone as secondary targets.

OPERATIONS AND RESULTS

Wildcat well 35/9-6 S was spudded with the semi-submersible installation Bredford Dolphin on 29 September and drilled to TD at 3740 m (3689 m TVD) in Late Triassic sediments of the Lunde Formation. The well was drilled with Seawater with Hi-Vis Sweeps down to 465.5 m, with KCl/GEM mud (3-5 % glycol) from 465.5 m to 1723 m, with Performadril mud (3-5 % glycol) from 1723 m to 2925 m, and with Performadril HT mud (3-5 % glycol) from 2925 m to TD.

Oil and Gas-Condensate, was encountered over a gross column of 434 meters in the Viking, Brent and Dunlin Groups. Hydrocarbons were proven in 5 different stratigraphic levels:

- Intra Heather Formation sandstone of Callovian age with top at 3256.9 m (3206.4 m TVD) contained oil
- Tarbert Formation with top at 3426.6 m (3376.1 m TVD) contained oil
- Etive Formation with top at 3505.5 m (3455 m TVD) contained gas-condensate
- Intra Drake Formation sandstone layers with top Drake Formation at 3552.3 m (3501.7 m TVD) contained gas-condensate
- Cook Formation with top at 3624.5 m (3573.8 m) contained gas-condensate

No oil shows were reported above BCU.

Seven conventional cores were taken in the well. Cores 1 to 4 were cut in the Heather Formation from 3266 m to 3318.5 m. These cores are shifted -1.5 m, -2.85 m, -2.45 m, and -1.65 m relative to logger's depth, respectively. Core 5 was cut from 3434 m to 3461 m in the Tarbert Formation; core 6 was cut from 3517 m to 3560 m in the Etive and Rannoch formations; and core 7 was cut from 3679 m to 3695 m in the Cook Formation. The core-log shifts for cores 5, 6, and 7 were 0.0 m, -0.9 m, and -0.95 m, respectively. MDT fluid samples were taken at 3258.93 m in Intra Heather Formation SST(oil), 3484.84 m in the Tarbert Formation (oil), 3512.32 m in the Etive Formation (retrograde gas), at 3592.1 m in the Drake Formation (retrograde gas), and at 3658.85 m in the Cook Formation (volatile oil).

The well was permanently abandoned on 7 December 2010 as an oil and gas discovery.

TESTING

No drill stem test was performed.