The Troll Field (past:- present-future) Tor Madsen (StatoilHydro)

Originally, the Troll field's thin oil layer of 4-27 m thickness was considered to have no commercial value. The development of horizontal drilling technology combined with early testing and oil production from a floating platform (FPSO) led to the conclusion that Troll West oil could be commercially produced. The most productive part of the field is the Troll West Oil Province (TWOP) with 22-27 m oil thickness. It was first developed by the installation of five subsea clusters and the Troll B FPSO in 1995.

Drilling and production performance led to further development of the even thinner oil layers (4-14 m) in the Troll West Gas Province (TWGP), and installation of the separate Troll C platform, which began producing in 1999. The Troll field is one of the largest subsea developments in the world with 107 wells currently in operation.

Increased oil recovery from the thin oil layers in Troll West has been possible by gradually increasing the length of the horizontal sections and introducing multi-lateral wells to reduce cost and increase the sweep area. Advanced drilling and completion technology have been developed and implemented. Seismic and geological methods determine the location of the high-permeable sands with high accuracy. The drilling and completion operations have been significantly more efficient, resulting in a higher drainage area per invested capital. Continous production drilling with up to four floating drilling rigs has been carried out since production start in 1995. More than 30 multi-branched wells with zonal control are in operation.