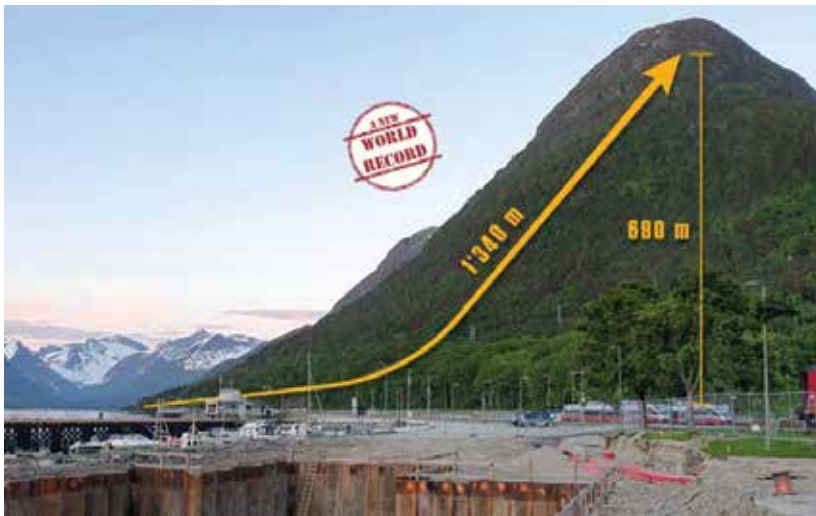


Åndalsnes, Norway project



Gyro Module, ParaTrack 2 and Large Field beacon (L.F.B.)

Distance: 1340m

Depth: 690m

Tracking used: ParaTrack 2 , Gyro Module, Large Field Beacon

Pipeline: Steel pipe, for gas, water, and electricity.

Horizontal Curve: 1300m

Entry/ Exit Angle: 90°/ 140°

Technique used: Gyro Module combined with Mud motor and At Bit Inclination Assembly (ABIA).

On this project we had a 250 Ton rig on the entry side. Starting with inclination of 90° and we punched out at an inclination of 141°.

We did not use an Exit coil, only the L.F.B.

The ground was Granite and we drilled without mud only with water.

The ABIA informed us of any inclination changes at the bit in front of the motor.

A perfect punch out, and a project well executed.

A World Record HDD drilling elevation of 690m!