

## Mini HDD lays 75 m (250 ft) electrical cable



In the German village Gangelt nearby Heinsberg a HDPE pipe OD 110 mm (4.3") had to be laid over a length of 75 m (250 ft) as a protection pipe for an electrical cable. This pipe laying project was done from one starting pit into two directions. This minimized the total efforts. The first section of 35 m (115 ft) was drilled underneath a private property. The second bore of 40 m (135 ft) was drilled underneath a public road.

This project was done by the contractor H.W. Gottschalk. They are a middle-sized construction company with 50 workers and employees. Gottschalk is a specialist for all kind of pipe laying project. Additionally they own a recycling company and a gravel quarry.

The first pilot bore 35 m (115 ft) required 4 hours, the backreaming up to  $\varnothing$  160 mm (6.3") with a pipe pulling OD 110 mm (4.3") 2.5 hours. Totally 1'100 ltr (290 gal) of drilling fluid were used with 25 kg (55 lbs) of the special Bentonite MAX BORE EH. The drilling fluid was prepared with special additives.

The second pilot bore 40 m (135 ft) was finished right on target after 3 hours. The backreaming and pipe pulling required 2 hours with 1'100 ltr (290 gal) drilling fluid with 25 kg (55 lbs) Bentonite.



Different directional heads are used in different grounds. The experts choose the suitable directional head.



Bentonite and the additives are mixed into the drilling fluid.



The TERRA MINI-JET MJ 1600 in the starting pit.



The pilot bore is located precisely with the locating system i-Track.



The new HDPE pipe is pulled in directly from a cable drum.



The backreamer 160 mm (6.3") with the HDPE pipe OD 110 mm (4.3") just before pipe pulling.



← Both HDPE pipes are pulled in (left and right).