

A waterline climbs up a hill



In the Northeast of Poland nearby the boarder to Lithuania and Russia M/s Raba had to lay a new fresh water line in a total length of 18 km (12 miles). Therefore they laid a HDPE pipe OD 110 mm (4.3") of the producer Wavin. Most of this new water line was laid by Horizontal Directional Drilling (HDD). A very interesting HDD bore of this project was a 128 m (425 ft) long bore underneath a small river. The river was 20 m (66 ft) deeper than the starting point. The final target was 50 m (165 ft) higher than the river. So the HDD bore began with a inclination of 33 % downwards, it undercrossed the river horizontal, then the bore went more than 30 % upwards.

The HDD bore was done with the TERRA-JET 5415 S. The operator David started the pilot bore at 11.00 h. The backreaming \varnothing 260 mm (10") and the pipe pulling of the 128 m (425 ft) long HDPE pipe OD 110 mm (4.3") was finished at 18.00 h the same day.

M/s Raba is a specialist in pipe and cable laying. The company was found in the year 1991. Besides contracting they are a successful dealer for Wavin pipes and fittings.



This truck of M/s Raba transports the whole HDD machine TJ 5415 S with accessories



View of the control station of the TJ 5415 S



1 TJ 5415 S during the starting of the pilot bore.



2 End of the pilot bore. View back onto the TJ 5415 S.



3 The drill head reaches the target point exactly in the part of the new waterline.



4 Butt fusion of the HDPE pipe OD 110 mm (4.3").



5 The backreamer OD 260 mm (10") with 130 m (425 ft) of HDPE pipe OD 110 mm are assembled.



6 The backreaming begins. Bentonite comes out of the jet nozzles of the backreamer.



7 The HDPE pipe is pulled in. The drill mud continuously flows backwards



8 TJ 5415 S during the backreaming

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