



# Project Case Poland, 2016 – The Chańcza Water Reservoir



## Project scope

- Drilling drainage holes to prevent water filtration from eroding the body of the Chańcza reservoir
- Number of holes: 307
- Depth/inclination: Up to 52 m (171 ft.)/vertical
- Scope of drilling/total meters: 10 632 m (34 882 ft.)
- Why water-propelled drilling? A high rate of penetration (ROP) and precision drilling was needed. After drilling to the projected depth, casing was used for cementation of individual zones.



Photo: <https://commons.wikimedia.org>

## Equipment & geology

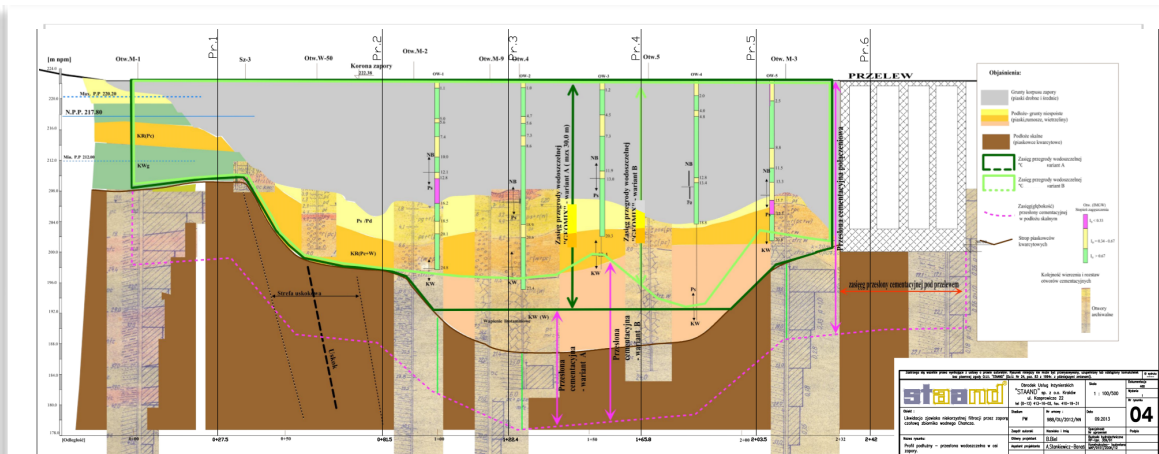
- Hammer model/sizes: WAI 40i
- Drill bit/Casing system: Super Max bit Ø152 (6")
- Pump: Halliburton HT400 and T10
- Water source: From the Chańcza water reservoir
- Drill rig: Two KLEMM 806
- Geologic formation: Different layers of grain sands, limestone and sandstone; each hole ended in solid sandstone.

## Main stakeholders

- Commissioner: RZGW Kraków
- Designing engineer: STAAND
- Main contractor: SOLEY Sp. z o. o.

## Project & drilling results

The earth barrier was sealed off and the length of the path of it was extended.



Cross-sectional view of the reservoir

