Piling

5000 Tonne Silo for Kriel Block – Phase 2

Mpumalanga, South Africa

Project Facts

Product
Auger piles

Market
Industrial - Mining

Client
Seriti Coal Mine

Main Contractor
WBHO

Achievements

- Excessive amount of boulder drilling as the site being overlaid with uncontrolled fill material. The drilling machine and equipment used enabled us to achieve the project milestone without delays.
- Installed 25 no. cased auger piles + test pile, as per the contractual program, and finished one week earlier.
- Total of 7 101 accident-free hours were achieved.

About the project

Kriel Colliery was granted an extension to mine underground at Block F to produce an average annual output of coal of 4.5Mtpa. The coal will be mined underground and transferred onto a conveyor which will be discharged into a 5000-ton capacity silo.

Challenges

- Excess drilling of boulders – machinery and drilling tools used
- Presence of water on some of the piles – used tremie pipes for casting concrete
- Spacing of the piles (limitation to optimize our production)
- Remote site (supplies for material, equipment and spares were limited) – ordering before the starts
- Cold stress (cold weather at the beginning of the contract)

The solution

Installation of 25 No. 1200mm diameter Cased Auger Piles(Oscillator) to an average of 35.6m below ground level on a site overlayed with approximately 28m of fill material.

All piles were subjected to integrity tests and none of the pile tests exhibited anomalies.