Description
As any Coal Mine expands, bleeder shafts are required for ventilation and mine safety. A long mine wall at a mine facility required a bleeder shaft approximately 16 feet in diameter, to a depth of 900 feet.

The new bleeder shaft would be installed through a few major aquifers that would add significant cost and delay to the construction of the shaft due to the infiltration rate of the water at these aquifers.

Solution
Helitech was contracted to construct a grout curtain wall to divert the water at the bleeder shaft location. Primary and tertiary, 6 inch diameter holes were drilled to the required depth of 900 feet. Helitech pressure grouted the holes in 50 foot stages, diverting the majority of the water away from the shaft site.

Results
The results were significant. The gallons per minute of water at the bleeder shaft location was greatly reduced; the original flow was over 35 gallons per minutes and was reduced to fewer than 8 gallons per minute over the course of less than 30 working days.