



ENLARGED COTTER DAM (ECD) GROUT CURTAIN / PERCUSSION DRILLING & AUTOMATED GIN FOUNDATION GROUTING



300M LONG GROUT CURTAIN FORMED UNDER ECD FOUNDATIONS TO 60M IN 200MPA RHYOLITE

PROJECT OVERVIEW:

Works involved construction of a grout curtain some 300m long and up to 60m deep beneath the Enlarged Cotter Dam and the drilling of foundation drainage holes throughout the dam monolith and dam foundations. Large spool hydraulic winches were installed at the top of each gallery incline to allow a 5t tracked drill rig and a skid mounted diamond coring rig to be hauled up the 42° stairs, gaining 80m elevation over the length of the incline. A fully automated grout injection control system was installed in the gallery, ensuring the GIN stop criteria were met accurately.

Upon completion of the grout curtain foundation drainage holes

were drilled beneath the dam monolith using DTH and top hammer techniques to optimise production and accelerate the program. Pressure relief drains were drilled from the crest of the dam using down the hole hammers, requiring extremely low deviation drilling to intersect the break through target area, 1.5m wide, on the gallery roof, up to 65m below (2% deviation).

Geovert completed the drilling and installation of all primary and secondary spillway anchors across the crest of the dam whilst maintaining the drainage and grout curtain program. Geovert had up to 5 drill rigs operating simultaneously across the dam crest and inside the gallery.

Services related to this project

- Injection Grouting
- Geotechnical Investigation
- Rock Bolting
- Restricted Access Drilling
- Draining Drilling
- Scaling

More information is available online at www.geovert.com