



GORDONSTONE MINE DEVELOPMENT PROJECT EMERALD, CENTRAL QUEENSLAND

Client: Gordonstone Coal Management Pty Ltd
Project Value: A\$35 Million
Duration: 1 Year, 8 Months

SCOPE OF WORKS

Gordonstone Mine is an underground black coal mine situated near the town of Emerald in central Queensland. The project required excavation and support of a 5.2m wide x 4.5m high decline at a grade of 1 in 4 and with a length of approximately 1,000m. A remotely controlled surface winder was used to service the works using rail mounted equipment and a sliding floor. All equipment was modified to comply with Queensland Coal Mining flame proof standards.

Excavation and support activities conducted in a continuous cycle through very soft wet mudstone, siltstone, clay and interbedded coal. These activities continued with the target coal seam to establish the pit bottom infrastructure and initial roadway driveage for the establishment of the first longwall block.

Redpath (then Eroc Pty Ltd) constructed a 225m deep, 2.4m diameter ventilation secondary egress shaft and provided evacuation and support for “pit bottom” and initial coal roadways.

CONSTRUCTION ACTIVITIES

- / Roadheader excavation and support with steel sets, fibre reinforced shotcrete and rockbolts
- / Install decline concrete floor and permanent rail track
- / Excavate and support decline bottom turnout structure 5.2m wide x 4.15m high for 325m
- / Blind bored shaft from surface and fully fitted out with winder, fixed guides and services, top and bottom man access stations and airlock
- / Excavate and support in-seam coal roadways, 5m wide x 3.2m high with a length of approximately 4,300m
- / Excavate and support overpass stone drives 5m wide x 3m high and totalling 560m in length

RESOURCES USED

- / AM75 Roadheader
- / Continuous Miners x 2
- / Diesel RAM cars x 4
- / Rope hauled muck cars x 5
- / Remotely controlled surface winder
- / Sliding Floor
- / Rail mounted moran cars x 2