## **PROJECT DETAILS**

#### Customer:

Centennial Coal, Mandalong Mine

#### Location:

Mandalong, New South Wales

# **Project Duration:**

April 2020

#### **Products Offered:**

- Bevedan® / Bevedol®
- Services

## **Industry Sector:**

Mining - Soft Rock

## Applications:

Ground control Services



# LONGWALL INSTALL ROAD STABILISATION MANDALONG.

Mandalong Coal Mine is located near Morriset in the Newcastle Coal Fields. The mine uses longwall mining methods to extract high quality thermal coal from the West Wallarah Seam. The longwall panels are approximately 170m wide and up to 3km long.

#### **CHALLENGE**

Mandalong encountered a geological fault structure zone within the Longwall 27 block which was required to be stepped around. As a result, a new install face for LW27b was driven, with longwall chocks installed along the install face to provide support to the widened roadway.

Contracted on site for the supply and installation of ventilation control devices and emergency response, Minova were tasked with consolidating the roof of the LW27b install to allow the safe removal of the line chocks, ready for LW27b installation.







## **SOLUTION**

Minova were requested to use our two-component polyurethane resin, Bevedan®/Bevedol®, for injection into the roof strata of the install face. Minova provided resin, equipment and expertise to ensure that the install face was consolidated successfully.

The initial injection campaign involved injecting 78 holes, to a depth of 6m and 7m, spaced across the width of the install face. With numerous injection holes taking the maximum amount of product, a second injection campaign was undertaken. This campaign focused on infilling the centre line injection holes and further consolidation of the roof on the inbye side of the install face, with an additional 53 holes injected.

As a NSW approved polymeric chemical, licensed for use in underground coal mining, Bevedan®/Bevedol® has successfully been used in Australian and German mining for over 30 years.

### **RESULT**

Minova was able to safely consolidate the roof of the LW28b installation roadway. An initial injection program was undertaken with a quantity of holes taking the maximum allowable volume under the NSW license.

Subsequently, a second injection program was completed to increase the roof consolidation. Upon removal of the longwall line chocks supporting the roof, minimal convergence was observed, the result of a successful campaign.

## **ACHIEVEMENTS**

- Consolidation of LW27b install face roof with Bevedan®/Bevedol®
- Two successful injection campaigns undertaken
- Minimal convergence on the install face once the chocks were removed and a safe LW27b installation

