# Dewatering at an Open Cast Mine Case Study | No.30





Water extraction from a middle pool to the exterior of the mine

# Codelco, Ministro Hales Division Chile | 2016

# **Working conditions:**

Extreme temperatures (-25° to 40°C)

# Pipes used:

Pexgol 160 mm Class 19 (SDR 9)

# Application:

Water extraction

# Length:

400 m

# The Challenge

The harsh environmental conditional where Codelco needed to install dewatering lines at the open cast mine, made the engineers opt for a change in their pipe material. They consider Pexgol as an option to decrease the repetitive failures they had with former materials.

#### The Solution

A 400 meters Pexgol pipe 160 mm Class 19 was provided, in one section without joints. The Pexgol pipe allowed a quick, reliable and easy installation on the harshest conditions of the open cast mine.





#### Water extraction from a middle pool to the exterior of the mine

#### Advantages

#### High resistance to wear:

Pexgol is the preferred solution for abrasive materials transportation. Typically resists three times more than HDPE and twice more than steel.

# Excellent chemical and corrosion resistance: Pexgol pipes can resist a wide range of chemical agents, slurries, toxic and radioactive materials.

# • High temperature resistance:

Working temperatures can range from -50°C/-58°F up to 110°C/230°F.

#### • Superb internal and external corrosion resistance:

Our pipes are proven to withstand decades of exposure to corrosive environments, with non-stop performance in some of the world's harshest environments.

#### • Low weight:

Compared to steel or rubber, Pexgol's solution results in reduced transportation, storage and labor costs due to lower weight per meter.

#### • Long pipe sections:

Pexgol's pipes can be supplied in long lengths coils, reducing number of joints, installation time and risk.

#### • Creep and impact resistance:

Pexgol's crosslinking piping solution can withstand high amounts of axial and radial stresses and are highly resistant to impact, fracture and fatigue.

Our pipes are also completely resistant to cracks

– even when dragged over sharp rocky terrain and coagulated salt crystals.



