### Case Study #117

# Water transport for fire network



Replacement of carbon steel pipes by Pexgol for fire fighting network.



# XX Profertil Argentina | 2022

## • Working Conditions Pressure: 15 bars

Temperature: Ambient

#### • Pexgol Pipe Pexgol 180 (6") 225 (8"

Pexgol 180 (6 ), 225 (8 ) & 280 (12 ) mm, Class 15

### Application

Water transport for fire network

# Length

1000 m / 3280 ft

# The Challenge

Profertil, an Argentine company specializing in the manufacture of fertilizers, has a fire network that is more than 10 years old working with carbon steel pipes. Given that the water they transport has a high chloride content, the lines were affected by corrosion and in many cases even with scale that obstructed the pipe by 50%.

# **The Solution**

In order to have an efficient fire-fighting network, the Profertil project team opted for a plastic pipe that does not suffer from corrosion, with less possibility of incrustations and its installation does not require specialized machinery.

Likewise, given bad experiences with other types of pipes in relation to installation and operation, the maintenance team carried out pressure tests and resistance to external damage with a sample that was delivered to them.

Finally, 3 lines with Pexgol pipes were installed and it is scheduled in other stages to completely replace the fire network, a total estimate of 7 km.

Electrofusion joints and accessories were used to carry out the derivations and changes of direction.

In relation to other materials and considering that in several places where the pipe had to be buried, obstacles were found from cables and other pipes, the installation was successful.





# The Advantages of Pexgol Pipe Systems







#### 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 nonstop performance in some of the world's harshest environments.



#### **Long pipe sections** Pexgol pipes can be supplied in long coil lengths, reducing number of joints, installation time and risks.



#### Creep and impact resistance

Pexgol pipes can withstand high amounts of axial and radial stresses and are highly resistant to impact, fracture and fatigue. Furthermore, Pexgol pipes are completely resistant to cracks even when dragged over sharp rocky terrain and coagulated salt crystals.

