## **Underground Operators Conference 2020**

## Pajingo Mine - "Teaching an old dog new tricks"

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## **ABSTRACT**

The Pajingo gold operation in Queensland is approximately 50 kilometres south of Charters Towers and 134 km south-west of Townsville. Located on the northern end of the Drummond Basin, the resource was discovered in 1983 and first open pit gold production began in 1986.

Gold production at Pajingo mine peaked in the early 2000's as the main Vera/Nancy lodes were extracted, producing 330k oz in 2003. More recently, as reserves and grade have diminished the mine has had to become innovative in its mining practices to maximise recovery of the resource. These practices include:

- Injection Grouting for crown pillar recovery, the most comprehensive set of trials in Australia
- Implementation of an azimuth aligner on production drills to improve drill hole accuracy and stope recovery
- Modified sub-level caving against previously mined/backfilled zones
- Use of wireless detonators for pillar recovery
- Use of triaxial tilt sensors for monitoring aggressive/unstable open pit walls

This paper will describe the learnings from each of the case studies and the impact the benefits will have on the life-of-mine plan for Pajingo as it sinks its first new decline in over 20 years. This paper also aims to assist other mines in reviewing options to recover what may have thought to be previously sterilised ore that could in fact be minable reserve with current gold prices.