

**CLASSIC ONE GEMS' MONO-ROPE WINCH CONVEYANCE SYSTEM
IMPROVEMENT**

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ABSTRACT

Classic 1 Gems Ltd has been using the same method of convey waste material to the surface since 2009. This system has been serving them well in terms of safety and adaptability of the system to the shape of the mine. However, this system incorporates the use of a plastic rope which is used to secure sacks filled with material onto the cable of the winch. The plastic rope can only be used once and therefore a new one has to be bought for the next conveyance. This increases their cost of production.

This is an opportunity for improvement which this project has exploited by using braeon and double hooks made from 2mm thick wire to replace the plastic rope. These two materials have proved through tests that they have long life, high strength and most importantly, cheaper to use than the plastic rope.