

## **100 ft. DEEP KELLY BAR BLASTING IN FLORIDA**

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### **ABSTRACT**

Kelly bar drilling and blasting is unique to Florida, the Bahamas and other marine limestone areas in the world where blast holes are required but will not remain open for the loading of explosives. This type of rock formation usually yields 1.5 tons of recoverable rock compared to 2.2 tons per cubic yard for competent limestone. The loss of .7 tons per cubic yard is due to voids and sand in the formation. These deposits all contain water to the top of the blast holes which are collared only a few ft. above the ground water level. The working pit is a water filled lake which is excavated from the bank by draglines. These drills have been used in Florida for many years to depths of 65 ft or less.

The kelly bar drill requires single pass drill steels for the full depth of the hole. There are two bits and two drill steels, one inside of the other to the full depth of the hole to be drilled. Originally the inner bit and steel were removed and explosives were loaded inside the outer drill steel while it was still in the hole. USA government regulations now prevent this type of loading and the holes are now lined with cardboard tubes which keep them open for the loading of explosives in a more conventional and safer manner.