

# RPS™ Delivers 18.5% Greater ROP

## RPS85 and 10-5/8" (270mm) RP63

### Copper Mine, Southwest US

**PERFORMANCE:** This copper mine utilized a competitive hammer and bit combination against Varel's RPS tool (no oil design) and RP 63 bits when drilling various 10-5/8" blast holes during a recent test period. The mine's engineering group went through the data and removed all the crest edge and fill area holes from the comparison. The RPS tool provided this customer with an average 18.5% ROP improvement over the competitive hammer with better bit life and eliminated the use of oil and concern for onsite oil contamination.

**TECHNOLOGY:** Varel's patented RPS percussion tools combine the synergies of both rotary and percussion drilling. Percussion blows combine with rotational forces to deliver impacts similar to chipping or chiseling. These blows are applied 16-30 times a second to smooth out torque resulting in less vibration, straighter bore holes, improved rock fragmentation, and increased ROP.

