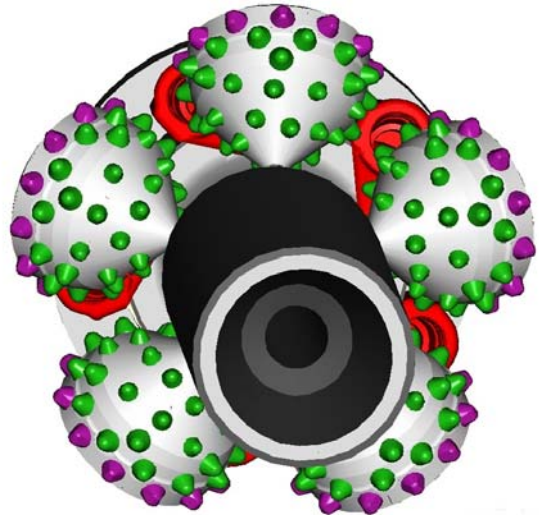


8" Random Rock 5 Cone Hole Opener Performance Update

- Location:** Tulsa, Oklahoma
- Operator:** Local HDD contractor
- Challenge:** Multiple holes – fiber optic cable installations.
Horizontal Directional Drilling application.
- Geology:** Sandy Shale, Limestone
Unconfined Compressive Strength up to 20,000 psi.



Result:

- *The hole opener has successfully reamer 450 feet and will be used on the next job.*
- *Cutting structure is virtually untouched and the bearings are in excellent condition!*

Features/Benefits:

1. *Patented RandomTM cutting structure provides more effective use of applied weight.*
2. *Specifically designed for the toughest drilling conditions. One cone style for any position.*
3. *Compensated Lubrication System*
4. *Unique locating system provides truer cutter positioning*
5. *Improved wall clearance for reduced shirrtail wear*
6. *Improved shirrtail protection – Hardfacing and TCI Inserts*
7. *5 cone reamer ensures SMOOTH running in difficult drilling conditions*