

# 43. S e d g e d

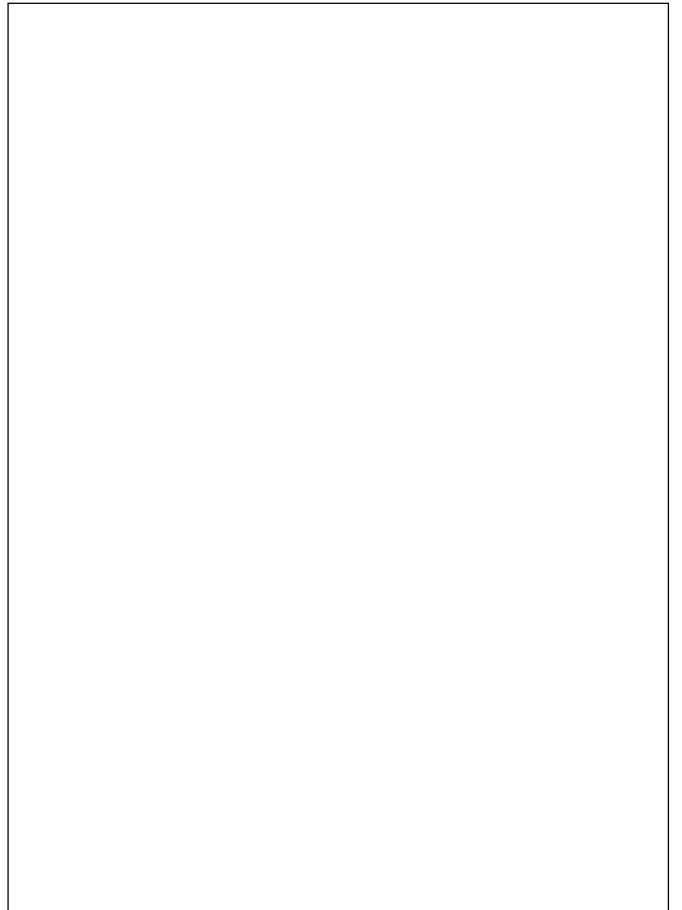
1. ( )  
60 )  
B

- For hard rocks, cutting tools will need cooling and lubrication.
- Rock cuttings and debris must be removed.
- Unconsolidated formations will require support to prevent the hole from collapse.

**D**  
The following low-cost, appropriate drilling methods are described and illustrated on the following pages:

- Percussion drilling
- Hand-auger drilling
- Jetting
- Sludging
- Rotary-percussion drilling
- Rotary drilling with flush

The table below may be used as a guide in the selection of the most appropriate drilling method.



**S**

**P**

**M**  
**C**  
**H**

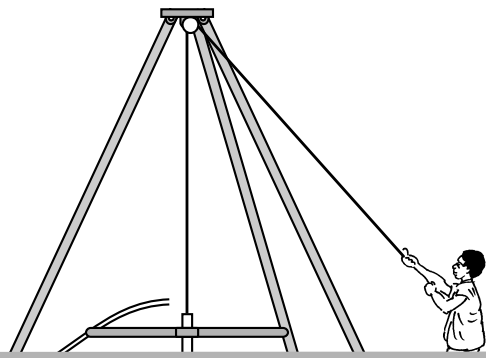
... the auger head) is  
... then withdrawn to  
... edure is repeated  
... This method is

... and n  
... arie  
... abo  
... o co  
  
... oth  
... avy  
... with unstable rock formations.  
... y holes to help remove cuttings.

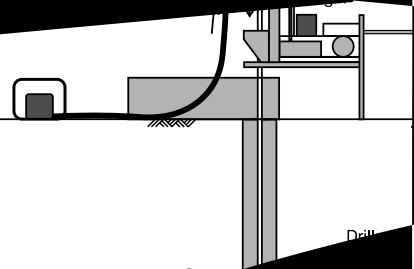
... ain.  
... :  
... are with other methods.  
... ent can be heavy.  
... oblems can occur with unstable rock formations.  
Water is needed for dry holes.

**V & W**  
Van Reekum Materials b.v., 115 Kanaal Noord, PO Box 98, AB Apeldoorn, The Netherlands.  
Tel: +31 555 335466 Fax: +31 555 313335  
V & W Engineering Ltd. (Vonder Rig), PO Box 131, Harare, Zimbabwe. Tel: +263 4 64365/63417 Fax: +263 4 64365

Water is pumped down the  
of the drill-rods, emerging as a  
It then returns up the borehole or  
-pipe bringing with it cuttings and  
bris. The washing and cutting of  
e formation is helped by rotation  
nd by the up-and-down motion  
e drill-string. A foot-powered  
le pump or a small internal-com  
ion pump are equally suitable



Air,  
flush  
hole



---

Prepared by Bob Elson and Rod Shaw

WEDC Loughborough University Leicestershire LE11 3TU UK  
[www.lboro.ac.uk/departments/cv/wedc/](http://www.lboro.ac.uk/departments/cv/wedc/) [wedc@lboro.ac.uk](mailto:wedc@lboro.ac.uk)

---

