

LITTLE BEAVER

EARTH DRILLS & AUGERS

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"Little Beaver How-To Series"

Basic Drilling Instructions with Soil Sampling Kit



DANGER: Never dig where there is a possibility of underground power lines or other hazards. Electrocution or serious bodily injury may result. Before you dig, call your local one-call agency.



DANGER: Keep the machine and drilling tools away from overhead electric wires and devices. Electrocution can occur without direct contact. Failure to keep away will result in serious injury and/or death.



CAUTION: Read and understand all operator's manuals for equipment being used before operating. These "Operating Instructions" are to be used as a supplemental aid, <u>not</u> replacement, with the Big Beaver Operator's Manual.

SETUP PROCEDURE:



Remove tower pins from stored position. Attach pulley, with rope installed, to tower.



Pivot tower up and secure with tower pins.



Attach front legs to tower with pins.



Extend back stay, pin, and secure with chain as described in the Big Beaver Operator's Manual.



Extend front legs, pin, and secure with chain.



Be sure all chains are taut for maximum stability. Base will be raised slightly.



Level the drill mast by adjusting leveling screw, chains and/or pins for the front legs.



Secure the drill frame by driving stakes through the holes on both sides of the frame.

<u>CAUTION:</u> Be sure cathead valve is not engaged during start-up. Keep clear of cathead during operation.



Attach torque tube and hydraulic power source as described in the Big Beaver Operator's Manual.



10 Drill to sampling depth.
Refer to Big Beaver Operator's Manual and/or Hollow Stem auger Instructions for proper drilling procedure.

SAMPLING PROCEDURE:



Insert split spoon sampler with respective amount of drill rod into hole. The ring at the top of tower may be used to guide/hold drill rod string when inserting into hole.



Connect rope to safety hammer (140 lb. max) using clevis and pin.



Wrap rope approximately 2 turns around cathead as shown.



4 With the hydraulic power source at full throttle, engage cathead valve to turn cathead clockwise (looking at end of cathead). Pull rope to slowly raise hammer to connect to drill rod.



Begin sampling as required by raising and dropping the 140 lb. hammer. The Standard Penetration Test (SPT) may be performed as described in the standard ASTM D 1586.

NOTE: Refer to Standard ASTM D 1586 for detailed description of performing the Standard Penetration Test (SPT).

<u>NOTE:</u> It may be necessary to use the hammer to dislodge split spoon sampler by tapping upward on anvil of hammer. The ring at the top of tower may be used to guide/hold drill rod when removing from hole. Repeat as necessary.

SAMPLING Cont...



6 Several optional tools (such as lift ring and clamp as shown above) are available to aid in sampling especially at greater depths.



7 The Big Beaver drill rig may also be mounted to trailer for improved drilling efficiency.