



**Toro
Downhole
Tools**

Highlights

**Record Run
Doddridge County, WV**

One Motor — One Bit

**110 continuous
hours to TD**

**Extended downhole
life in a pneumatic
application**

Toro Motor Record Run 110 hours drilling with Air

CHALLENGE:

Participate in the intermediate section utilizing air as a drilling medium, extend downhole drilling life and maximize ROP.

SOLUTION:

A Toro 675-9:10-3.0 very Slow Speed Motor with a 1.76° Adjustable Bend Housing utilized with a Baker 8-3/4" Insert drill bit. This Toro Motor operates at a 0.10 RPG, producing 13,500 ft.-lbs. peak torque and is designed to operate in liquid and pneumatic applications.

RESULTS:

The well was drilled in 110 hours for a total depth of 3,115 feet using a single Motor and drill bit. During the run, the Motor slid 612 feet for 26 hours and rotated 2,503 feet for 84 hours at 35 rpm. The Motor was in the hole for a total of 148 hours operating at a flow rate of 1,100—2,800 cfm and 1/2 gal. of oil mist per hour. Working in concert with the Directional Company, Toro believes this to be a new record for a motor running continuously in an air application.

OPERATOR VALUE:

The Operator was able to drill the intermediate hole using a single Toro motor and a single drill bit from top to bottom. By utilizing a Toro Downhole Drilling Motor, the customer avoided unnecessary costs by eliminating trips for motor and bit replacement. By controlling the bit speed, the motor was able to remain in the hole until the rig reached its maximum pull capabilities. Once the job was complete, the Motor was sent back to Toro for a complete disassembly and inspection. The Motor showed minimal wear considering the time and application the tool was used in.



Reliable Tools / Proven Performance

