



**Toro
Downhole
Tools**

Highlights

**Toro Motor Optimizer
performance in Howard
County, TX**

**Intermediate section
completed with
One Motor — One Bit**

**Lower drilling costs,
increased ROP**

Toro Motor Optimizer Performs in Howard County, TX

CHALLENGE:

The customer typically utilized (2) Downhole Drilling Motors and (2) drill bits to complete the intermediate section. Toro was asked to provide a solution that would increase downhole tool and drill bit life, increase ROP, and lower drilling costs.

SOLUTION:

A Toro 650-9:10-3.0 VSS Motor was utilized in concert with a 650 Toro Motor Optimizer. The VSS Motor operates at a 0.12 RPG, producing 12,000 ft-lbs. peak torque. The Motor Optimizer improves the rate of penetration (ROP) by controlling both the vertical and rotational reactive forces of the motor. The Toro Motor Optimizer helps to improve drilling performance by maintaining the WOB on the motor thus keeping the drill bit firmly on bottom.

RESULTS:

In the previous well, the intermediate section required (2) trips of (2) Toro Motors and (2) drill bits. Drilling time was 149.5 hours with a ROP of 43.25 ft./hr. On the second well, the customer utilized a Toro 650-9:10-3.0 VSS Motor and a 650 Toro Optimizer. The section was drilled with (1) Toro Motor and (1) drill bit for a total of 90 hours and a ROP of 56.67 ft./hr. The result by using the Optimizer was improved performance and increased ROP.

OPERATOR VALUE:

By drilling the section with (1) Motor and (1) drill bit, the Toro Optimizer improved BHA life, lowered drilling costs, and increased ROP by 13.42 ft./hr. The performance and reputation of the Toro Optimizer was documented as a valuable tool within the BHA. The customer's expenses were significantly lowered by eliminating extra trips and drill bits, increasing his profits accordingly.



Reliable Tools | Proven Performance

