

PRED-O-TOR

Case Study

WELL CONSTRUCTION

REAMER SHOES



BEYOND TECHNOLOGY • BEYOND NORMAL

Foreword

Varel Energy Solutions are specialist in wellbore construction products. Our Well Construction solutions are widely recognized for their ingenuity, performance, and reliability. However, it is our People and undeniable passion for winning that sets us apart. We are in the business of building partnerships while ensuring our customers reach their objectives as quickly and cost-effectively as possible. We are Well Construction you can count on.

The Pred-O-Tor reamer shoe has been designed to be an uncompromising solution to today's most challenging wellbore conditions. We have been able to leverage our years of experience in drill bit design to create a reamer shoe that is fit for purpose. The nose has an innovative profile design to aid in getting casing to T.D. by overcoming wellbore restrictions, but also includes integral hard-faced blades and optimized jetting, to ream and clean out the hole as the casing is run. The addition of PDC cutters on the outer shoulder of the Pred-O-Tor allows the shoe to efficiently ream and open the hole, where formation issues have impacted string progress. The blades have tungsten carbide buttons to further assist with hole cleaning.

Challenge

A major Operator in Pakistan faced issues with their intermediate 12-1/4" Hole section while drilling. The Operator faced multiple sections of mechanical caving of the claystone formation which resulted in bridging. Even with hard reaming, there were still points of tight spots that stalled the motor. The Operator knew that in order to get casing down, they would require an aggressive reamer shoe.



The Industry's Most Aggressive Reamer Shoe

Solution

The Operator decided to run the 9-5/8" x 10-3/4" Varel Pred-o-tor shoe. The 9-5/8" Casing was run 3 days with continuous reaming at 30-60 RPM. The rig also continuously pumped for 35 hours at rates of 9-12 bbl/min through the floats. The casing was able to reach the desired depth and the cement job was performed successfully with the floats holding the differential hydrostatic pressure.