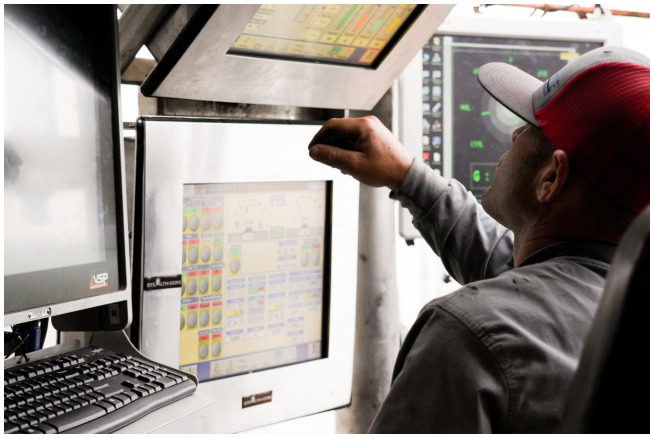
AUTODRILLER® PRO
CONTROL SYSTEM

AN INDUSTRY-FIRST THAT ENABLES SMOOTH DRILLING USING DIFFERENTIAL PRESSURE

H&P's advanced drawworks control system smoothly controls block velocity while regulating inputs from differential pressure, torque and/or weight on bit (WOB). The Autodriller® Pro control system accomplishes an industry-first by seamlessly transferring to/from WOB and differential pressure, while maintaining smooth drilling that doesn't require changing gain settings at the drillers console.



A CONTROL SYSTEM THAT KNOWS WHAT IS IMPORTANT, WHEN IT MATTERS MOST.

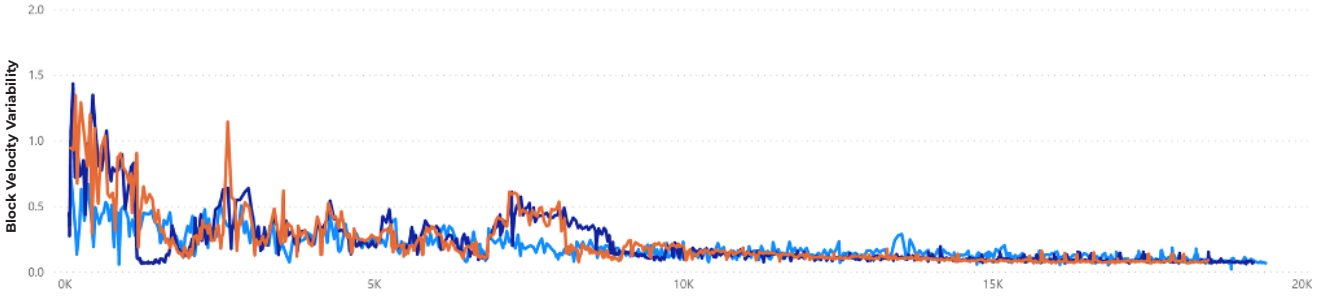
By design, this system automatically regulates to the parameter most in control at the time (differential pressure, weight on bit, and torque) in order to maintain smooth block velocity to improve consistent bit/rock engagement. Smooth block velocity results in less axial oscillations from surface, providing a higher rate of penetration (ROP) and improved bit and downhole tool reliability.

OUTCOMES

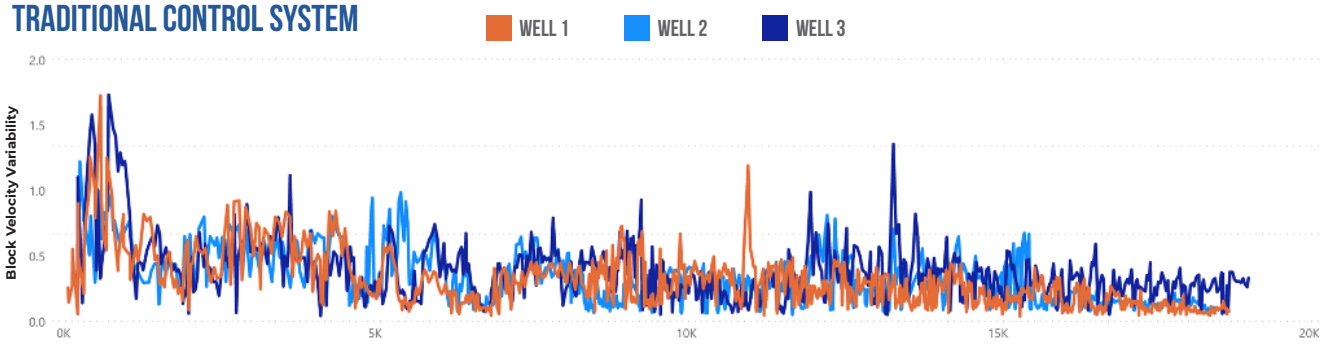
COMPARE THE PERFORMANCE

› Average Rotating ROP improved 21%, 31% in Int, lateral section respectively
› Average time saved drilling while rotating 16.6 hours (~$30k/well)
› Total on bottom-time reduced by 17%

AUTODRILLER® PRO CONTROL SYSTEM

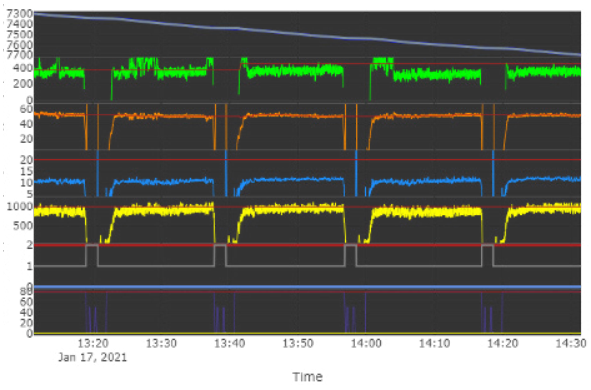


TRADITIONAL CONTROL SYSTEM

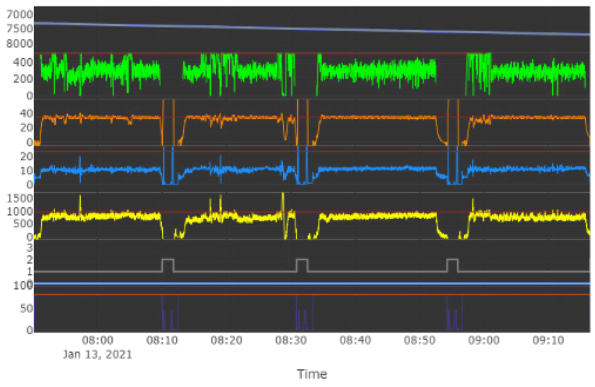


OBSERVATIONS AT THE SAME DEPTH INTERVAL

AUTODRILLER® PRO CONTROL SYSTEM



TRADITIONAL CONTROL SYSTEM



RATE OF PENETRATION (ROP) WEIGHT ON BIT (WOB) TORQUE (T) DIFFERENTIAL PRESSURE (DELTA P)

› Higher differential pressure maintained with the Autodriller® Pro control system—contributing to higher ROP
› Payout stability observed with reduced variation
› ROP limit is disabled on the Autodriller® Pro control system with ROP overshoot observed on 4 of 5 stands

---

CONTACT US

For more information on how our Drilling Engineering Services can help you achieve better drilling outcomes, contact an H&P sales representative today or contact us through our website at **helmerichpayne.com/contact**.

It's time to follow through on your drilling performance potential.