

Kantori autonomous directional drilling maximizes ROP and saves 22 hours in challenging hole section

CHALLENGES

Drilling in carbonate formations presents several challenges:

- Risk of sudden loss of drilling fluid
- Stuck pipe events
- Wellbore instability and excessive formation washout
- Shock and vibrations in bottomhole assembly and drillstring while drilling through interbedded limestone and dolomite layers
- Narrow windows to change drilling parameters to optimize rate of penetration
- Extended rig time and greater risk of exceeding AFE

SOLUTION

Deployed [Kantori™ autonomous directional drilling](#) in advisory mode in the Baker Hughes Remote Operations Center

- Automated torque and drag service provides early warning of hole instability and stuck pipe events
- Artificial intelligence mimics manual torque and drag to improve average gross connection time and maximize ROP while maintaining a high-quality wellbore
- [Kantori™ optimization services](#) adjusts drilling parameters in real time to mitigate vibration and improve ROP while minimizing downhole tool damage.

RESULTS

22 hours

saved in drilling challenging hole section compared to previous well

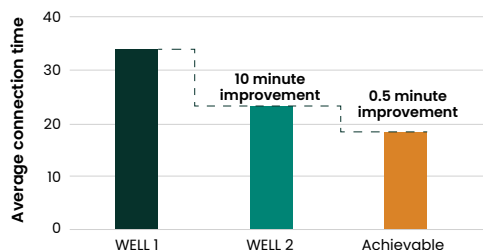
5% improved

ROP while creating a smoother wellbore for optimal casing run and completion operation

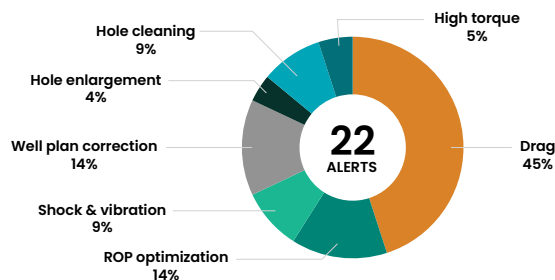
Zero stuck pipe

or fluid losses recorded during drilling

Connection practices



Alerts actioned



The Kantori drilling automation services generated 22 early warning alerts that mitigated stuck pipe risks and saved 22 hours of total drilling time versus previous well.