CASE STUDY: ALGERIA ONSHORE OPERATIONS

16-in. hole section: Optimizing ROP and weight-to-weight times

CHALLENGES

- Tool failures due to downhole vibrations
- Longer circulating and reaming times to prevent pack-offs and stuck-pipe events
  - Previously drilled without dynamic, real-time modeling
- Conservative drilling parameters reducing ROP to mitigate tool vibrations

SOLUTION

Corva and i-Trak™ applications were used to monitor and improve operational performance, including:

- i-Trak to monitor bed height concentrations
- Corva to optimize surface drilling parameters to maximize ROP while mitigating downhole vibrations with i-Trak
- Reduced reaming times following the automated torque and drag trend deviation tendency

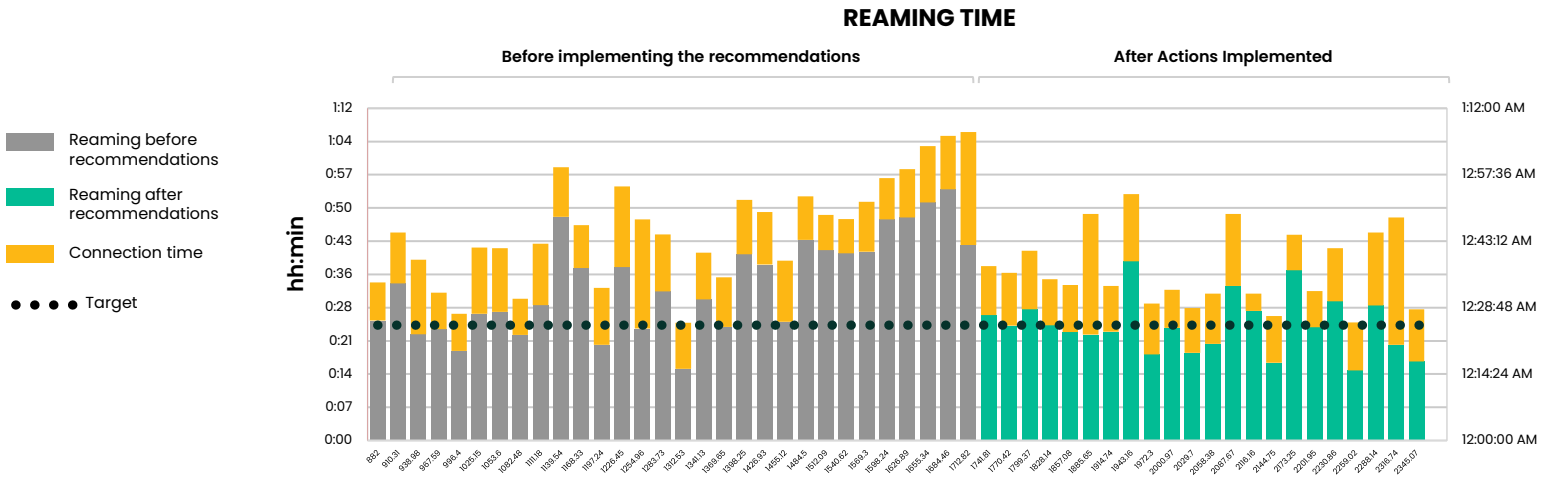
RESULTS

57%
weight-to-weight time improvement from recommendations

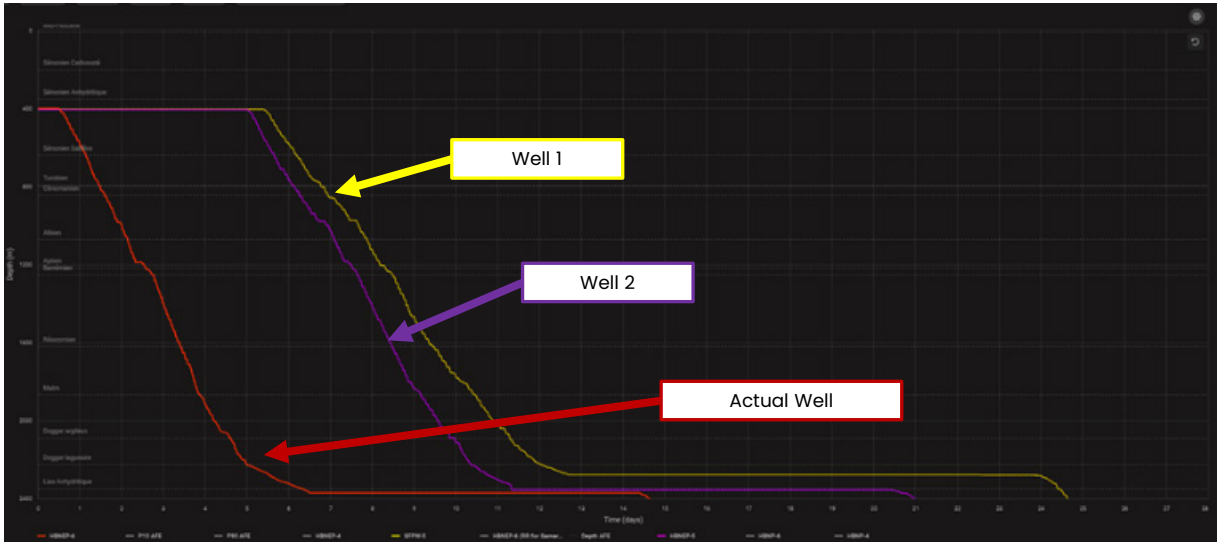
11%
ROP improvement due to optimized drilling parameters

1 day
saved compared to nearest offset well

CORVA | Baker Hughes



Weight-to-weight trend change before (gray) and after (green) making operational recommendations.



Comparison of actual drilling performance versus nearest offset wells.