

Baker Hughes 3D bit drilling simulation software optimizes Kymera, offering higher ROPs and lower cost-per-foot

CHALLENGES

- Up to 3,000 ft section length
- Hard, abrasive and interbedded formations
- PDC bit damage from torque fluctuations
- Extra bit trips and low ROP with PDCs

SOLUTION

- Kymera™ hybrid drill bit technology optimized with 3D Tetrahedron™ bit drilling simulation software
- Optimize for:
 - Increased bit aggressiveness to improve ROP
 - Maintain torsional stability and durability
 - Balanced TCI cutting structure to improve bearing and seal reliability

RESULTS

50% farther
distance drilled

39% faster
ROP than average

Better dull condition
vs. baseline Kymera

Effective
bearings and seals

15% decrease
in torque for smoother drilling

23% lower
cost-per-foot

