

6 1/8" PRODUCTION SECTIONS

Uintah County, Utah, US

\$62K
POTENTIAL COST SAVINGS

27%
DECREASE IN BIT HOURS

15%
INCREASE IN AVERAGE ROP

The Thruster provides consistent force to bit by balancing hydraulic and mechanical forces. This balance provides smooth energy transfer to the bit, even in erratic situations. By providing consistent parameters, the Thruster reduces shock and vibration, BHA damage and failures.

THE CHALLENGE

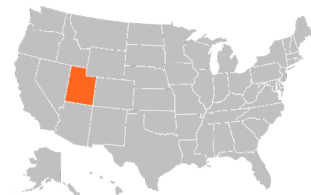
A Rockies operator experienced constant damage to their drill bits in their 6.125" production sections. TAQA Drilling Solutions was contacted to review the current BHA and find a solution to increase bit life and also, drill the section with a single bit.

THE SOLUTION

Applying the Thruster at the BHA allowed the shock tool at their vibratory tool to extend and compress as planned and allowed the string in between the two to move axially, breaking friction and moving more effective weight to it.

THE RESULT

The Thruster assisted the operator in increase bit life by improving the bit gradings. Due to this, the drill hours were decreased by 27% which ultimately led to an increase in the average ROP of approximately 15%.



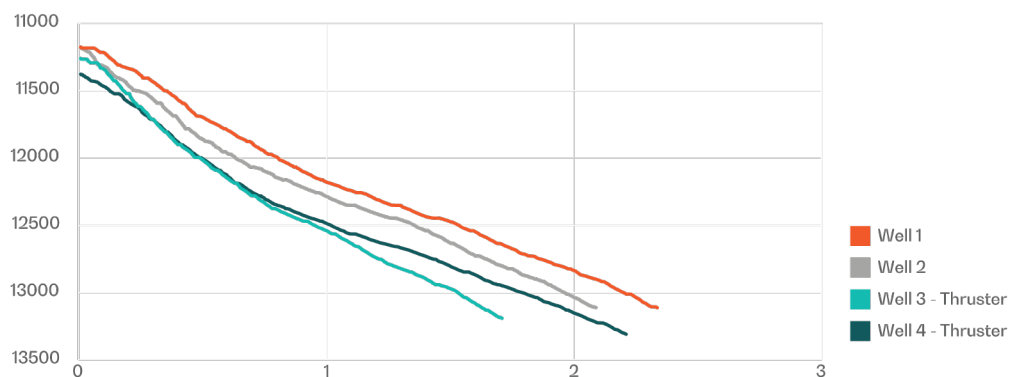
Production Section Results

| Well | Total Drilled (ft) | # Bits | Bit Hours | ROP (ft/hr) | Bit Grade | Thruster |
|--------|--------------------|--------|-----------|-------------|-----------|----------|
| Well 1 | 1,944 | 1 | 48 | 79 | 2 5 | No |
| Well 2 | 1,932 | 1 | 44 | 84 | 1 2 | No |
| Well 3 | 1,932 | 1 | 35 | 99 | 0 1 | Yes |
| Well 4 | 1,938 | 1 | 48 | 76 | 1 0 | Yes |

Thruster BHA Placement

- Bit 6 1/8"
- Mud Motor..... 5"
- MWD 4 3/4"
- Thruster 5"
- Vibratory Tool ~2,100' Back

Days VS Depth (ft) – 6 1/8" Production Sections



*Same type of drill bit and mud motor used in all laterals.