



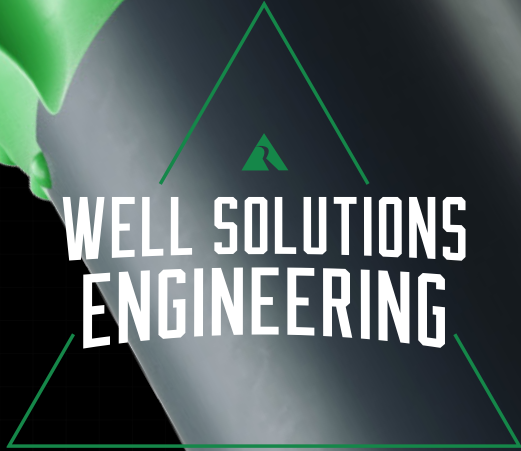
MIDLAND UPTON, PERMIAN
TEXAS, USA



DRILLING ENHANCEMENT | ROLLER GUNDRILL REAMER

PERFORMANCE REVIEW

8-3/8" ROLLER GUNDRILL REAMER

The logo for Well Solutions Engineering, consisting of a large green triangle with a smaller green triangle inside it, and the text 'WELL SOLUTIONS ENGINEERING' in a bold, sans-serif font to the right.

WELL SOLUTIONS
ENGINEERING

APPLICATION SUMMARY

APPLICATION

- 6x oil production wells, Midland Upton, Permian, Texas, USA
- Performance review of the 8-1/2" lateral drilling using 7" mud motor, 1.75 1.75° bent angle
- 4x benchmark wells were drilled using 8-1/4" NM stabilizers placed just above the bent motor
- 2x wells were drilled using 8-3/8" Roller GunDRILL Reamers (RGDR) replacing the stabilizers
- Oil production application
8-1/2" horizontal sections Max
Inc = 95 95°

CUSTOMER CHALLENGE

- WOB and TQ fluctuations
- Drill bit severe damage
- Poor sliding ROP
- Well path corrections

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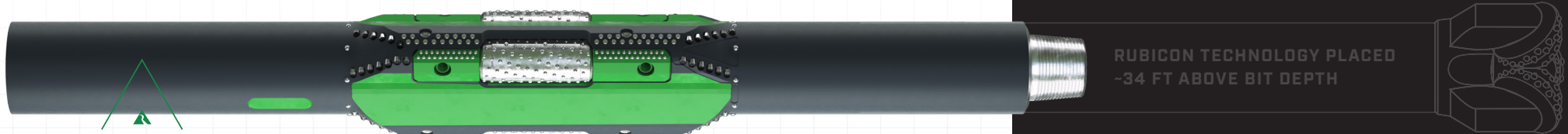
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RUBICON SOLUTION

- The 8-3/8" Roller GunDRILL Reamers (RGDR) were placed ~34ft above bit depth, just above the bent motor
- The RGDRs were used to reduce torque fluctuations, mitigate the BHA vibrations and increase overall ROP.
- 1/2" lateral from ~9,300ft to TD (~ 10,300ft section) on a single bit run.

RUBICON TECHNOLOGY

Roller GunDRILL Reamer



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 **RUBICON**
OILFIELD INTERNATIONAL

RGDR ADDED VALUE OVERALL ROP INCREASE

The charts below illustrate the on bottom rotating and sliding ROP values in wells. ROP values are directly linked to the wellbore condition and BHA dynamics.

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THE FACTS

Up to

76%

rotating ROP increase

Up to

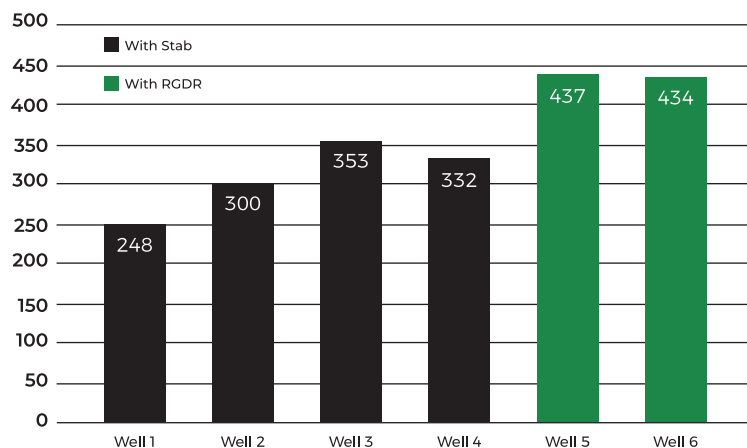
70%

sliding ROP jump

Up to a 76% rotating ROP increase and 70% sliding ROP jump on the length of interest after using the Rubicon Roller GunDRILL Reamer proving a better wellbore condition and a more efficient drilling process due to mitigated BHA dynamics



Average Rotary ROP (ft/hr)



Average Sliding ROP (ft/hr)

