



## WWT Silencer

WWT Non-Rotating Silencer Utilized  
To Maintain Directional Control

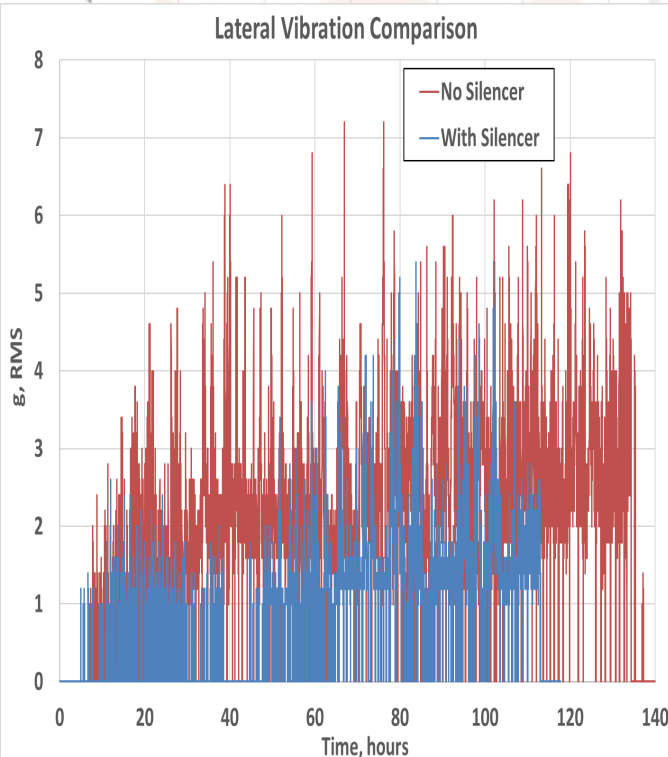
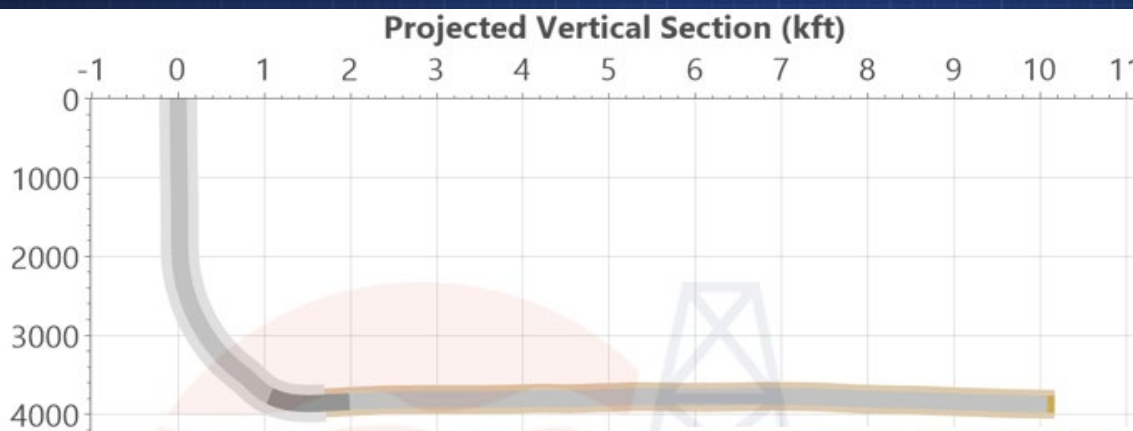
# WWT Silencer Reduces Slide Drilling, 90% ROP Increase

### Executive Summary

- The WWT Silencer installed directly behind the motor acted as a dampening stabilizer to reduce high frequency vibration and mitigate build tendencies. The Silencer helped drill the county's record length bit run at nearly double the rate of penetration.

### When compared to the previous well drilled without the Silencer:

- No outer wear to the drill bit, indicating mitigation of bit tilt and whirl.
- Reduced required slide drilling lateral footage from 55% to 11%.
- Increased ROP from 99 to 188 ft/hr.



**Bit after setting record length run. No wear to outer pads/shoulders.**



**Silencer in good condition after reaching TD (drilled 12,398')  
Avg OD wear = 0.21".**