

Permian Basin

TrackMaster Nexus™ Whipstock System Boosts Tripping Speed by 122%

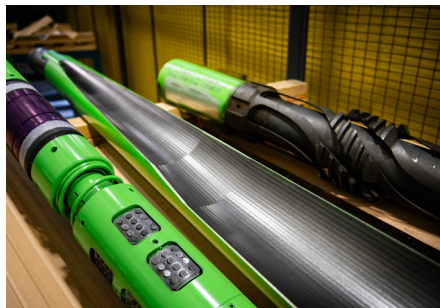
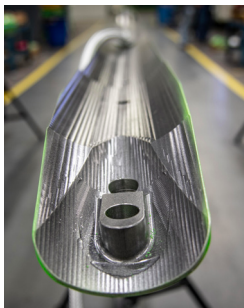
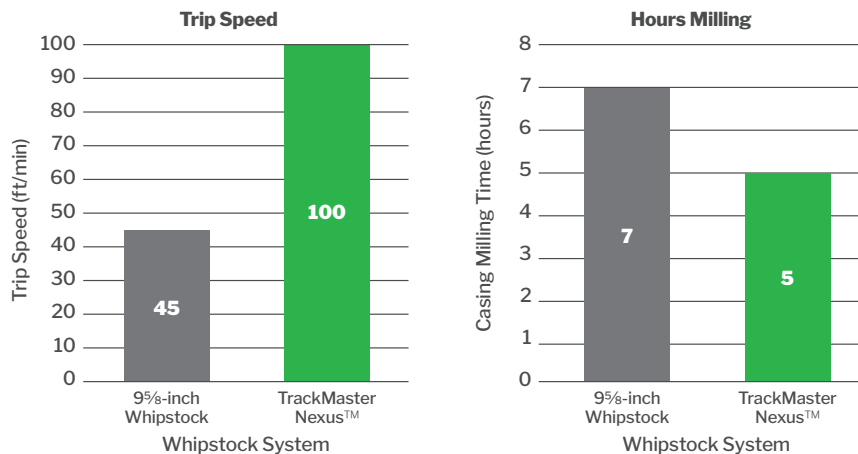
Enhanced mill-to-whipstock interface with TrackMaster Nexus increases tripping speed to 100 ft/min

Increased Efficiency and Streamlined Operations

The TrackMaster Nexus™ whipstock system delivered enhanced operational reliability through an improved milling assembly attachment design. A key feature was the high-strength integral lug, which doubled both axial and torsional load capacities compared to the previous generation.

This advancement enabled faster tripping speeds, with the system run in hole at 100 ft/min—resulting in a 122% efficiency gain over conventional whipstock systems.

Additionally, the whipstock was deployed with an integrated casing scraper mounted below the anchor, allowing simultaneous wellbore cleaning and eliminating the need for a separate cleanout run. This streamlined approach reduced rig time and improved overall operational efficiency



Whip Syst. Size: 9 5/8-inch TrackMaster Nexus
CH Exit Size: 9 5/8-inch 40# L80
Mill Type: 8 3/4-inch TrackMaster Nexus Tri-Mill
Sidetrack Depth: 5,440 ft MD
Inclination: 3.5°
Max Pass Through DLS: 1.88° /100 ft

CHALLENGE

- Execute a cased hole sidetrack operation through 9-5/8 inch, 40 lb/ft L80 casing
- Simultaneously scrape the casing during the trip in hole
- Ensure precise window milling and a smooth trajectory transition into the sidetracked wellbore

SOLUTION

- Deployed a one-trip 9-5/8 inch CH TrackMaster™ Nexus whipstock system with hydraulic anchor
- Utilized an 8-3/4 inch TrackMaster Nexus tri-mill assembly, featuring a hybrid lead mill and TruEdge™ cutters strategically positioned on the gauge area
- Integrated a casing scraper mounted below the anchor assembly to enable simultaneous wellbore cleaning during deployment

RESULT

- Increased tripping speed to 100 ft/min while deploying the TrackMaster Nexus system
- Integral casing scraper eliminated the need for a dedicated cleanout trip
- Completed milling of an 18-foot casing exit window in just 5 hours, followed by a 14-foot rat hole in 1 1/4 hours—all in a single trip
- Reduced casing milling time by 30%, delivering an 18 foot window in 5 hours
- TruEdge cutters on the lead mill measured 1/8 inch under gauge; the dress mill remained in gauge, confirming tool durability and precision