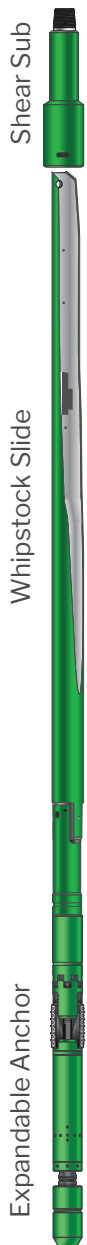


Major Permian Basin Operator achieved a Record-Setting Lateral Sidetracking Operation Using the TrackMaster* Select-OH Whipstock System

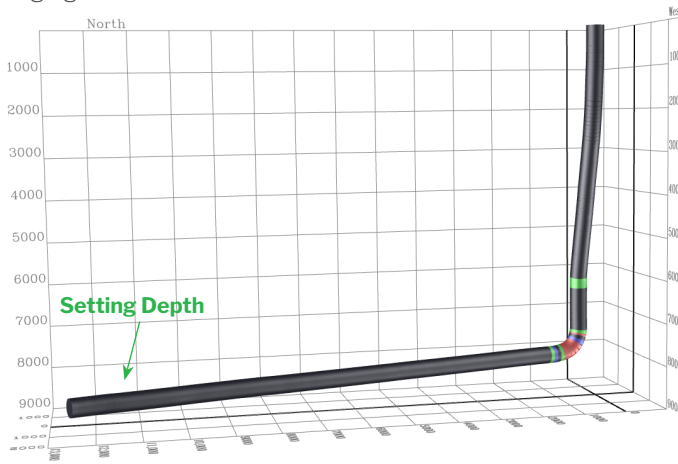
Wellbore Integrity Solutions (WIS) successfully planned and executed a 6¾ inch open hole sidetrack located at 9,750 ft in the lateral section with TrackMaster Select Whipstock setting depth at 18,675 ft measured depth (MD) in the Permian Basin.



Flawlessly executed open hole lateral sidetrack.

A prominent operator in the Permian Basin collaborated with the WIS Red Baron wellbore departure team for an expert solution to sidetrack in a 6¾ inch lateral with the top of fish located at 20,759 ft MD. WIS recommended a 7⅝ inch TrackMaster OH System with hydraulic anchor conveyed on a shear sub to achieve the wellbore departure sidetracking objectives. The implementation of the shear sub sub-assembly presents a technical solution for deploying the whipstock through intricate wellbore sections without premature fatiguing of the break bolt. This is achieved by applying direct force between the shear sub and whipstock assembly, ensuring that the shear screw encounters load exclusively during overpull (tension) conditions.

The 7⅝ inch TrackMaster OH system with the hydraulic anchor was oriented to the desired direction using MWD and properly set at 18,675 ft MD, preserving over 9,750 ft of lateral. An optimized bi-mill kickoff assembly was used on a subsequent trip, delivering an 11 ft window plus 10 ft of rat hole. Further, tri-axial slips on the WIS hydraulic anchor are capable of opening up to 9.13 inches, providing a reliable and secure grip in case OH gauge inconsistencies are encountered. The unique design features of the WIS TrackMaster modular system were instrumental in getting the customer back to drilling for a successful OH lateral sidetrack around any obstacle in challenging wellbore conditions.



TrackMaster Select™

- A HISTORY OF INNOVATION
- UNRIVALED EXPERIENCE
- GLOBAL PRESENCE

- Location:** Permian Basin
- Whip System Size:** 7⅝ inch TrackMaster
- OH Size:** 6¾ inch Horizontal
- KOP:** 7,815 ft MD
- Start of Horizontal:** 8,930 ft
- Sidetrack Depth:** 18,654 ft MD
- DLS @ Whipstock:** 0.25° /100 ft
- Max Pass Through DLS:** 12.9° /100 ft
- Inclination @ Whipstock:** 90°

CHALLENGE

- Deliver a 6¾ inch open hole sidetrack at an unprecedented depth located 9,725 ft into the horizontal section.
- An ability to travel with a whipstock system through a curved section with high DLS due to irretrievable fish in an existing wellbore.

SOLUTION

- Select the 7⅝ inch OH TrackMaster Modular Whipstock with shear sub system and hydraulic anchor.
- Use of the shear sub system to allow slack-off weight to be applied without fatiguing the shear bolt due to challenging OH wellbore conditions.
- Evaluate well trajectory and propose specific orientation at the desired direction at a setting depth of 18,675 ft MD.

RESULTS

- Delivered a new record with the deepest open hole lateral sidetrack using a whipstock around an irretrievable fish in the wellbore.
- Preserved over 9,725 ft of lateral sidetracking, eliminating extra time and expenditures for a re-drill.
- Achieved wellbore departure objectives by delivering an 11 ft window plus 10 ft of rat hole.
- Optimized mill cutting structure to match OH formation characteristics.
- Reliable sidetracking method with a known kickoff point reduced risk and uncertainty of alternative sidetracking methods.

*Mark of Wellbore Integrity Solutions. Other company, product, and service names are the properties of their respective owners. Copyright © 2024 Wellbore Integrity Solutions. All rights reserved. WIS-PB-MKT-235_rev4