

WWT JetReam Succeeds in the Permian

Operator Identifies WWT JetReam as a Solution After History of Difficult Casing Runs in the Area.

Well Basics:

- Horizontal well with 9-5/8" casing set at bottom of vertical section.
- Target depth approx. 8,900ft.
- JetReam set up to open centerline at 13bpm (550gpm).
- History of difficult formation and wellbore stability problems frequently results in casing-running difficulty.

JetReam in Action – Running Casing

- The operator has tried numerous guide shoes and reamer shoes without finding an ideal solution.
- The WWT JetReam was called out after the operator expected difficulties in running 9-5/8" casing.
- Clean run to 7,300ft, then casing started taking weight due to formation.

JetReam in Action - Reaming

- JetReam effectively reamed through approx. 400ft and 10hrs+ of hard reaming with 10 to 30klbs WOB.
- Customer reported that the JetReam appeared to be just as effective as other more 'aggressive' reamer shoes.
- JetReam continued with jetting and occasional reaming to TD.
- Successful casing run. Reamer and jetting feature effective throughout the run.

JetReam in Action - Cementing & Drill-out

- Customer converted centerline at pre-set flow rate for cementing.
- Drill out was reported to be much faster and easier than competing reamer shoes that have been run on these wells.



Location: Texas, USA
 Well Type: Land, Horizontal Well
 Objective: Run 9-5/8in casing through difficult formations.
 Solution: WWT JetReam
 Results: Successful casing runs.



WWT JetReam, showing reamer blades surrounding jetting nozzles. Centerline nozzle opens when needed.



Example of WWT JetReam reaming structure, with embedded ceramic cutting structure. Notice drill-out path is clear for fast drill-out.