

TECH REPORT

PERMIAN

MIDLAND BASIN

WELL PARAMETERS

Casing diameter, in	5½
Casing weight, lbm/ft [kg/m]	20 [30]
Total depth, ft [m]	20,422 [6,225]
True vertical depth, ft [m]	9,733 [2,967]
Kick-off point, ft [m]	9,065 [2,763]
Lateral length, ft [m]	10,522 [3,207]

Background

An operator in the Permian asked Xtreme Coil Services, a Schlumberger company, to drill out 101 composite frac plugs quickly and efficiently to begin production as soon as possible. Conventional technology would take as many as seven trips to remove so many plugs, but the operator wanted to minimize the number of trips.

Technology

- X-Mill* real-time CT milling software

*Mark of Schlumberger

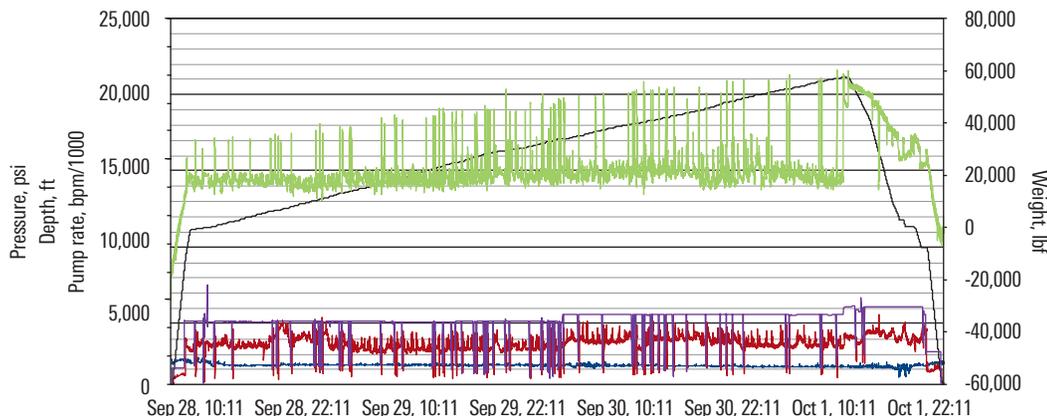
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Xtreme Coil Services Mills Out 101 Frac Plugs in One Run and Saves 21 Hours

Large-diameter CT enables efficient frac plug millout in Permian basin



Xtreme Coil Services designed the frac plug drill out to take advantage of the high pump rates and high annular flow rates that come with 2½-in coiled tubing, making it easier to clean the debris generated from the drill out. X-Mill software was used to optimize the drilling rates for the job using sensors to indicate real-time pressure and weight data. This prevented motor stalls caused by too much WOB. The total time spent in the wells was 87 hours with an average of 17.7 min spent per plug. There were no short trips or BHA trips, which saved up to 21 hours for the overall job.

- CT correlated depth
- Circulating pressure
- Total pump rate
- Wellhead pressure
- CT weight

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