Tartan completions

CASE STUDY

Tartan Cemented MultiFrac Limited Entry Ball-Drop System Reduces Stimulation Time by 5 Days per Well Compared to Plug-and-Perf in the D-J Basin

OBJECTIVE

A Colorado-based independent operator working in the Denver-Julesburg (D-J) Basin in Weld County wanted to increase stimulation efficiency and reduce costs on 7 wells in the Wattenberg Field. The wells were drilled to an average true vertical depth of 6,600 feet and an average total depth of 16,800 feet.

The operator was looking for a cemented completions solution on this series of wells that would also increase limited-entry cluster efficiency compared to cemented plug and-perf completions while providing repeatable reliability.

SOLUTION

Tartan Completions worked with the operator to develop a hybrid cemented completions design using Tartan's MultiFrac™ limited-entry, ball-drop system featuring patent-pending BurstPoint™ ports. Each well comprised 31 treatment stages with 3 MultiFrac sleeves (clusters) per stage for a total of 94 sleeves at the toe. The upper portion of each well was completed with an average of 40 plug-and-perf stages.

Each casing string was floated into the well and 2 were rotated during installation, highlighting the MultiFrac system's ease of being installed into long reach horizontals.

The 7 wells were stimulated using cross-linked gel and slick water. Each of the 31 MultiFrac treatment stages was pumped using an average 260,000lbs of proppant. Dissolvable balls were utilized with positive pressure indications for all tools in each stage.

RESULTS

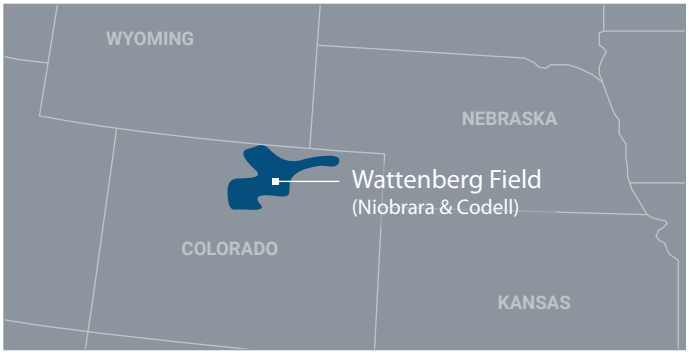
Tartan's portion of each well was stimulated in an average of 48 hours, representing a 5-day savings in stimulation time. (The hybrid completions allowed direct comparison of stimulation times between MultiFrac and plug-and-perf. Based on the time required to stimulate the plug-and-perf top portion, the MultiFrac bottom portion would have taken ~7 to 9 days to stimulate with plug and perf).

All 7 wells exceeded wellsite type curves, including the best production/1000 ft lateral and best production in the company (more than 10,000 bbls/1000 lateral feet in its first six months). MultiFrac with BurstPoint ports delivered improved stimulation treatment placement and effectiveness by preventing proppant erosion and enabled cluster efficiencies in excess of 90% throughout each treatment stage.

Further, these reduced stimulation times were realized in what is typically the most challenging portion of the well– the toe of an extended reach horizontals.

All 7 wells were fracked with 100% operational success, confirming the reliability of Tartan's MultiFrac system.

Tartan Completions' BurstPoint ports also improve stimulation treatment placement and effectiveness by preventing proppant erosion and enabling cluster efficiencies in excess of 90% throughout each treatment stage.



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