

StackFRAC HD outperforms other completion methods in the Cardium

[Canada, Cardium](#)
[StackFRAC HD System](#)

Ball-activated multi-stage systems have been a popular completions method in the Cardium. In recent years, operators have begun exploring alternative completion techniques to further unlock reserves; however, data suggests more hydrocarbons are produced by wells completed with Packers Plus ball-activated systems.

Challenge

Operators continue pushing the limits of drilling and completions technology to maximize production while minimizing cost. These efforts have led to tighter stage spacing, increased stage counts, lateral lengths and larger volumes of fluid and proppant during stimulation treatments.

Solution

The [StackFRAC® HD](#) system provides a ball-activated method to stimulate multiple sections of a target zone. The first stage is hydraulically activated to establish communication with the reservoir, while the remaining stages are stimulated by pumping balls of incrementally larger size from surface in a single, continuous pumping operation. Since the ball for the next stage is pumped in the flush of the previous stage, completion time and fluid usage are reduced. Balls can also be flowed back if desired, saving on the cost of drillouts.

Results

Packers Plus ball-activated completion technology outperforms offset wells in the Cardium formation, despite averaging 10 fewer stages, shorter lateral lengths, less proppant placed and longer stage spacing. Data from 50 StackFRAC HD wells was compared with 49 offset wells in the Pembina field. The offset wells in the field were from one completions supplier and all wells were completed after January 2015. The StackFRAC HD wells out-produced the offset wells on average by 7% on cumulative BOE, 24% on cumulative BOE per 1,000 m lateral, and 64% on cumulative BOE per stage after 6 months production.



7% higher StackFRAC HD production at 6 months



24% higher StackFRAC HD production per 1,000 m lateral at 6 months



64% higher StackFRAC HD production per stage at 6 months

Packers Plus is the innovator of multi-stage fracturing systems, providing field-proven and cost-effective methods for completing horizontal wells with superior production results in numerous formations around the world, including mature reservoirs.