

Operator maximizes efficiency using Diffusor sleeves in hybrid completions

[Canada, Montney](#)
[Diffusor System](#)

An operator completing cemented wells in the Montney was looking for an efficient and cost-effective way to overcome the limitations of coiled tubing completions when stimulating long laterals.

A well with over 2,800 m of lateral length was successfully cemented and completed using a hybrid solution that implemented TREX™ Diffusor® ball-activated sleeves for the lower 15 stages.

Challenge

An operator experimenting with coiled tubing-activated sleeve systems in the Montney was evaluating other methods to improve cost and operational efficiencies. The operator wanted to mitigate known challenges with coiled tubing completions, such as accessing the toe in long wells, and lowering risks inherent to downhole tool operation.

Solution

The operator designed a well using Packers Plus TREX Diffusor ball-activated sleeves for the lower stages. The most significant benefit of the sleeves was the interventionless stage activation and stimulation. This eliminated the need to trip coiled tubing through the full length of the liner, and reduced all the risks previously mentioned associated with coiled tubing.

Secondly, all the Diffusor stages would be treated in one continuous pumping operation, reducing overall downtime for better operational efficiency.

Finally, to maximize flow rate, large bore ball-activated sleeves were planned for the 15 stages following the hydraulic toe sleeve. The rest of the lateral was treated using coiled tubing-activated sleeves.

Results

The hydraulic toe sleeve and 15 ball-activated stages were completed in under 30 hours, 25 hours of which were nearly continuous pumping time.

Since this completion, the operator installed over a dozen similar wells, using the same configuration of ball-activated Diffusor sleeves in the lower stages.



Ball-activated Diffusor sleeve

The Packers Plus TREX cemented product line of tools offer a wide range of solutions for cemented liner well completions, including the PrimeSET™ Liner Hanger, hydraulic toe sleeves, and ball-activated sleeves for single point or limited entry.