

# Dual element packer wells outperform offset single element packer wells

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

Effective stage isolation is a key factor in well completions. An operator working in Alberta's Cardium formation achieved higher production from wells using RockSEAL® H2 dual element packers, compared to offset wells completed using single element packers.

## Challenge

Packers deliver zonal isolation for multi-stage completions. Among hydraulically-set open hole packer designs, single and dual element designs are the most common.

The two points of contact of dual element packers provide effective isolation along a longer section of the wellbore. The additional element also ensures that pressure reversals load onto the second element rather than the previously stressed element.

Single element packers are adequate for smooth wellbores with low differential pressure and for isolation between ports for limited entry stage designs. While the single element packer has a smaller sealing length, its shorter length can make it easier to install in tight wellbores and is typically a more economical purchase.

## Solution

The operator completed multiple open hole horizontal wells in the Willesden Green field of the Cardium formation using both types of packers, including: Packers Plus RockSEAL H2 dual element packers, Packers Plus TuffSEAL™ single element packers, and single element packers from another supplier.

A study was conducted to determine if these packer choices resulted in significant differences. The wells compared were completed around the same time, had similar stage counts, fluid and proppant volumes, and lateral lengths.

## Results

Subsequent production showed that the RockSEAL H2 wells had the highest production after 3 months of initial production. Average cumulative production for the RockSEAL H2 wells was higher than both the TuffSEAL wells and the single element supplier wells. Although single element packers have a lower upfront cost, the total end completion costs for the single element supplier wells were, on average, 39% and 42% higher than TuffSEAL and RockSEAL H2 wells, respectively.



These results demonstrate the significant performance advantage of Packers Plus RockSEAL H2 packers. Packers Plus packers are designed, tested and manufactured to the highest standards, providing field-proven zonal isolation solutions.