Case Study
SlicFrac

Eliminate Bridge Plugs using Mid-Stage Diversion

Case Study No. 6206

DETAILS:
Location: Various Locations
Formation: Mid-Con
Operation Depth: +/- 21,600’
Well Orientation: Horizontal
POD Type: Bio-Rez Lo Degradable PODs
Type of Operation: Plug ‘n Perf (SlicFrac Diversion)

A customer in the Mid-Continental (Mid-Con) USA, utilizes bridge plugs to provide isolation between perforation intervals while stimulating their wells with hydraulic fracturing. Their typical well design for a 1.5-mile lateral wellbore is upwards of 60+ stages, completed by plug and perf. This completion method is an industry standard, in which some applications have utilized as many as 125 bridge plugs in a single wellbore.

The customer began using SlicFrac Perf PODs, for mid-stage diversion, to improve perf cluster efficiency and increase overall production. Halfway thru the stimulation on each stage, Perf PODs were deployed to divert fluid from the dominant perforations and provide breakdown of the less dominant or under stimulated perf clusters, followed by the remaining stimulation volume.

To optimize procedure and reduce completion costs, the customer began to exclude a portion of the bridge plugs, resulting in extended stage lengths.

Ultimately, 2/3 of the bridge plugs were eliminated tripling the amount of clusters between plugs, with Perf PODs being deployed between proppant cycles. The overall cost associated with the required services and on-site personnel (including wireline runs, bridge plugs, frac standby, coiled tubing, milling, water usage and third party rentals) can all be greatly reduced by replacing a portion of the bridge plugs with SlicFrac Perf PODs for mid-stage diversion.

SlicFrac allowed the customer to reduce their average per-well completion costs by over $400,000 while achieving or exceeding expected production levels. These cost savings enabled additional wells to be included in their completion program.

'Customer Averaged $400k in completion savings'