## Case Study SlicFrac®

Eliminate Bridge Plugs with Wireline Deployed Perf POD™ plugs and Mid-Stage Diversion

Case Study No. 6205

## **DETAILS:**

Location: Carter County, OK

Formation: Mid-Con

Operation Depth: 14,800'

Well Orientation: Horizontal

POD Type: Bio-Rez® Lo Degradable PODs

Type of Operation: POD 'n Perf

89% of Plugs

The typical Plug 'n Perf completion utilizes a single wireline run to set a bridge plug and then perforate the next interval prior to frac stimulation. The number of bridge plugs utilized in a single wellbore is dependent on the length of lateral, number of clusters and stage spacing. Post frac stimulation, bridge plugs are removed from the wellbore utilizing a milling assembly deployed on either Coiled Tubing (CT) or Jointed Pipe.

A customer, looking to optimize their well completion, employed Thru Tubing Solutions' SlicFrac POD 'n Perf System to minimize the number of bridge plugs deployed in the wellbore during a toe to heel frac stimulation. The SlicFrac POD 'n Perf System incorporates a wireline POD Tool assembled onto the end of a standard #10 setting tool. Utilizing the stroke of the setting tool to shear an inner chamber releases the PODs from the bottom. Perf POD plugs seal inside each individual perforation, providing isolation for the new perforations above. A complete "POD out" with each deployment allows the customer to ensure casing integrity with a pressure test, prior to perforating the next interval. By replacing bridge plugs with Perf POD plugs, TTS was able to reduce the total number of plugs in the wellbore from 19 down to 2 while maintaining the customers planned stage spacing and cluster volume.

TTS deployed additional Perf POD plugs from surface for mid stage diversion to optimize the frac stimulation and achieve maximum cluster efficiency throughout the entire stage. The post frac cleanout consisted of milling out 2 bridge plugs, essentially saving numerous days on location and all associated costs for services and equipment. Degradable Perf POD plugs provided the optimal solution for this customer by maximizing cluster efficiency and eliminating all extra costs associated with utilizing bridge plugs throughout the lateral.