



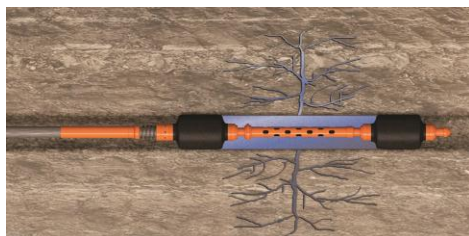
CASE HISTORY

Reservoir Optimization: Stimulation

Insta-Set Valve® installed on the PosiFrac® Straddle Tool

GREATLY IMPROVED FLOW RATES AND EFFICIENCY IN OPEN HOLE SAND FRACTURE

PosiFrac Straddle System with Insta-Set Valve® delivers better flow rates and completes jobs in half the time, using less water and with no dropped balls.



Insta-Set Valve installed on the PosiFrac Straddle System



CHALLENGES: An operator in Canada with well programs in Southeast Saskatchewan and South Manitoba requested a solution that would improve the flow rates and efficiency of their open hole fracturing operations. The operational costs for drilling rigs, pumping units, hydraulic fracturing fluid, and various other project costs make it an economical challenge to stimulate the wells.

SOLUTION: TAM provided the customer with the Insta-Set Valve® installed on the PosiFrac® Straddle System. The Insta-Set Valve consists of a dual-purpose rotatable ball valve that can be utilized to divert and isolate fluid within an inflatable element and also provide an unrestricted flow area for hydraulic stimulation fluids. While in the “Run-In/Inflation” position, the ball valve is closed, isolating the internal tubing volume. In this position, the packer inflation ports remain open, eliminating the need to circulate a ball down for each set, significantly reducing operating time. Once the straddle packers are inflated and anchored, the setting mechanism is cycled to the “Set/Stimulation” position via work string weight. The control tube extension is shifted down, positioning the inflation ports between seal sets, which locks the inflation volume within the elements. This downward movement of the work string simultaneously cycles the ball valve mechanism to the open position, exposing an internal flow area greater than the packer tube below the tool.

RESULTS AND BENEFIT: By using the Insta-Set Valve installed on the PosiFrac Straddle System, TAM was able to complete the fracture work in roughly half the time it would take with a standard collet choke. In addition, a significant amount of hydraulic fluid was saved as there is no need to circulate a ball to seat between stages to set the packer. Also, the large ID can increase flow rates, which can be used to further reduce the time to complete the fracture work at each interval. These efficiencies translate to real cost savings by reducing the net days on-site for rig/coil units, pumping units, water hauling, and all other capital/operational costs associated with the fracture operation.