Polymer Injection into Gas Producing Well

Single Set Inflatable Packer with 250 TE Element

Location: Colombia

CHALLENGE: An operator in Colombia had a gas producing well that was losing production into a thief zone below the producing interval. Isolation with a packer had to be achieved in open hole to isolate the gas production and allow a large volume of polymer to be pumped into the thief zone. The extremely low fluid level and 1,700 psi wellhead pressure challenged field operations to have a controlled, successful inflation of the inflatable packer.

SOLUTION: TAM deployed and set a Single Set Inflatable Packer on coiled tubing in the open hole section to pump the planned 4,000 barrels of polymer to block the thief zone. TAM’s proprietary Fluid Control Valve with by-pass feature and a flapper type check valve was run above the packer. The Fluid Control Valve allowed the coil tubing to be run with fluid inside, and not inflate the packer while deploying to setting depth. After the packer was successfully set, weight was applied to the Fluid Control Valve to transition to the by-pass mode to pump the polymer into the thief zone.

RESULTS AND BENEFIT: The packer was deployed to setting depth, successfully set and 2,500 barrels of polymer were pumped successfully sealing the thief zone.