Case Study

AQUEOUS™ Compact Injectable Shoe Sets New Standard for Reliability and Simplicity

APPLICATION
5-1/2” production string for plug and perforation application.

TECHNOLOGY
AQUEOUS™ Compact Injectable Shoe

LOCATION
Permian Basin, Texas, USA

APPLICATION
Deploy 19,355ft of 5-1/2” 20# production casing in a horizonal well with a TVD of 8,500ft. Provide the ability to establish shoe track injectivity, secure the well and test casing.

CUSTOMER CHALLENGE
Improve ROI by maximizing formation exposure, reduce number of premium connections, lower risk of unplanned events due to equipment malfunctions and loss of injectivity. Maintain float valve pressure integrity when floating casing and waiting on completion. Provide sufficient flow area to pass floatation sub debris.

VAREL SOLUTION
AQUEOUS™ Compact Injectable Shoe with proprietary valve cartridges eliminate the need for debris baffles and concerns with assembly mishaps. The dual wiper plug, and top wiper plug with high pressure rupture disk do not require multiple landing baffles which eliminates the need to weaken the first wiper plug. Seal integrity throughout the system ensures accurate rupture pressures and gas tight reliability. Incorporate redundant ball seats for casing test and hydraulic activation.

CUSTOMER VALUE
Operational excellence and reduced premium connections on accessories by two. Injectivity achieved during toe preparation after 70 days.

5.500” AQUEOUS Compact Injectable Shoe

Major U.S. Permian Basin Operator

“The AQUEOUS tool worked smoothly with no operational disruption. I am very pleased with the functionality.”
- *Drilling Engineer*

VAREL ENERGY SOLUTIONS