

## Success Story: Lonestar Completion Tools' 5.5" FRIO Dissolvable Frac Plug Excels in West Texas

### Introduction

After an extensive trial phase, Lonestar Completion Tools (LCT) was awarded the opportunity to deploy a full wellbore of its FRIO dissolvable frac plug for an operator in West Texas. The region, known for its heavily produced water, required a reliable solution to withstand challenging conditions.

### Background

West Texas is notorious for their demanding conditions, due to the heavily produced water that complicates material selection of dissolvable plugs. To address these challenges, LCT conducted multiple water analyses and dissolve tests to select the correct material for the FRIOplug. The objective was to achieve a frac integrity limit that aligned with the customers needs.

### Deployment

The 5.5" FRIO Dissolvable Frac plug was deployed in the Ball on Seat (BOS) configuration. This setup allowed the operator to save on fluid usage and increase time savings by avoiding the need to deploy the ball from the surface. The main concern with the BOS configuration is the potential failure of the gun string at depth, which would typically require a tractor or coil tubing to deploy a new perforating gun string, resulting in additional time and cost.

### Overcoming Challenges

During the deployment, the wireline was unable to perforate stage after successfully setting the FRIO Dissolvable frac plug. This challenge required an immediate and effective solution. The operator decided to apply 9,500 PSI and shut in the well, relying on the plug's known frac integrity limit of 12 hours to monitor the pressure and determine when the plug had dissolved enough to re-establish communication with the previous zone.

### Results

The FRIO Dissolvable Frac Plug held the applied pressure of 9,500 PSI successfully for the full 12-hour period. This allowed the operator to continue operations on the additional wells on the pad without disruption. At 12.5 hours, the plug dissolved enough to allow fluid to be pumped to the previous stage. Enough rate was established that pumping a new plug and gun string was possible. The plug's performance not only validated the material selection and dissolve testing conducted by LCT but also demonstrated the FRIO Dissolvable Frac Plug's reliability under challenging conditions.

### Impact

The successful deployment of the 5.5" FRIO Dissolvable Frac Plug in the BOS configuration had a significant impact on the operator's efficiency and cost-effectiveness. By preventing the need for additional equipment and operations, the plug saved both time and money. The seamless continuation of operations on other wells highlighted the FRIO frac plug's role in maintaining productivity and minimizing downtime.

### Conclusion

The success of Lonestar Completion Tools' 5.5" FRIO Dissolvable Frac Plug in West Texas exemplifies the importance of rigorous testing and customized solutions in the oil and gas industry. The plug's ability to hold high pressure and dissolve as expected within the required timeframe set a new standard for performance in harsh environments.