

Reduction in Tubing Leaks & Rod Failures Achieved

LPS has worked closely with an operator in the Permian Basin to establish a case study for lined tubing in severely deviated wells. LF115 was installed on thirteen high failure rate wells in the Permian, and the performance of these wells was **monitored for two years**. The results showed a significant step change reduction in the failure rates of rod and tubing in wells that used LF115 lined tubing.

The Challenge

- Severe Deviations led to frequency of tubing leaks
- Rod wear enhanced by corrosion
- Average Failure rate: 1.96
- Average pump depth: 11,500 ft
- Low producing wells prohibited expensive solutions like Boronized tubing

LPS Solution

- Removed all rod guides
- Installed LF115 in as little as 1/3 of tubing string, depending on failure history
- Paired LF115 with a mix of conventional and continuous rod

Well Selection Criteria

- Total fluid: < 250 bpd
- Side load: > 100 lbs
- Primary failure mode: tubing leaks

RESULTS

- Failure rates dropped from 1.96 to 0.38
- Zero tubing leaks in LF115 lined sections over 2 years
- Tubing Failure Rate was .06 per well, per year
- Saved \$134,400 per well, per year in workover costs
- Only one intervention due to tubing leak in an unlined joint

Performance Results

