

CASE STUDY

Extending ESP Runtime by Actively Reducing Gas Interference in Permian Basin

GasGuard™



THE CHALLENGE

An operator in the Permian Basin faced recurring gas interference issues across multiple wells. Excess free gas entering the ESP caused gas lock events, unstable operation, production interruptions, and increased intervention requirements. As gas-liquid ratios increased, maintaining consistent ESP performance became increasingly difficult.

The operator needed a solution that would stabilize operations, protect existing ESP assets, and improve overall production reliability without major infrastructure changes.

THE SOLUTION

The operator partnered with FET to deploy **GasGuard fluid conditioning technology** ahead of the ESP intake.

GasGuard actively conditions the production stream before it reaches the pump, reducing the amount of free gas entering the ESP. By lowering gas interference at the source, GasGuard helps operators maintain pump fillage, prevent gas lock conditions, and keep ESP systems operating within their intended performance range.

Rather than replacing existing equipment, the operator enhanced the performance of its current ESP installations by addressing one of the industry's most persistent production challenges—excess gas at the intake.

THE IMPACT

The operator's evaluation showed that GasGuard helps operators take control of gas interference before it impacts ESP performance. By stabilizing operations, the operator improved runtime, enhanced system reliability, and positioned wells for more consistent production performance.

When operators properly condition fluid to limit gas interference, they unlock greater reliability, lower operating costs, and stronger returns from their ESP assets.

AVERAGE ESP RUNTIME

Metric	Before GasGuard	With GasGuard
Average Run Life	224.5 Days	461.5 Days
Improvement	—	+51%

The operator increased average ESP runtime by nearly two months, helping reduce downtime and intervention frequency across evaluated wells.

FIELD PERFORMANCE HIGHLIGHTS

Well	Run Days Before	Run Days With GasGuard
Well A	158	467
Well B	291	456+*

The strongest performer, **Well A**, extended runtime from **158 to 467 days**.

*Well B is currently still online.

WHAT DROVE THE RESULTS?

GasGuard addresses one of the most persistent ESP challenges — excess gas entering the pump. By managing the mixture of gas and liquid reaching the ESP, GasGuard enabled the operator to:

- ✓ **Extend ESP runtime and increase equipment availability.**
- ✓ **Reduce gas lock events and production interruptions.**
- ✓ **Improve operating stability across gas-challenged wells.**
- ✓ **Lower intervention frequency and associated operating costs.**
- ✓ **Maximize the value of existing ESP infrastructure without major capital investment.**



**SEE WHAT
GASGUARD
CAN DO FOR
YOUR WELLS**

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Condition the Fluid. Protect the Pump. Maximize Runtime.