

GasGuard™

CASE STUDY

PROVEN PERFORMANCE IN THE PERMIAN BASIN

► SUMMARY

WELL STATISTICS

- Permian Basin Installation
- 5.5" 20# Casing
- Setting Depth
- Horizontal Well
- GLR up to 3600 SCF/STB
- Oil Cut up to 30%

IMPROVEMENTS

- 100% uptime
- No trips or shutdowns
- Increased production by average 76%
- Amp signature improvement
- Drawdown from 691 psi to 543 psi (21% decrease)

► BACKGROUND

Gas interference and gas locking conditions represent one of the largest challenges facing the ESP industry today. Though technology has recently developed to address gas management through gas separation and handling, limitations of this technology arise in the presence of gas slugging and GVF approaching 70% and beyond. Facing challenges of high GLR applications can be extremely costly for producers. Gas interference can not only lead to continuous loss of production from faults and decreased efficiencies of the ESP but can also lead to failure of electrical components of the ESP system from continuous cycling or inadequate liquid flow past the motor, which results in overheating and stress on electrical components of the ESP system.

► PROBLEM

A major producer in the Permian basin had experienced significant gas interference issues with their ESP despite the use of both a gas separator and gas-handling pump. Although the oil cut percentage was high for this well, the flow rates had fallen to below 500 bpd despite efforts to keep the ESP online. The decision to convert from ESP to plunger lift had become the only alternative to keep production online. After multiple shutdowns of the ESP from underload faults, the ESP system inevitably experienced failure as an electric ground failure and was pulled.

► SOLUTION

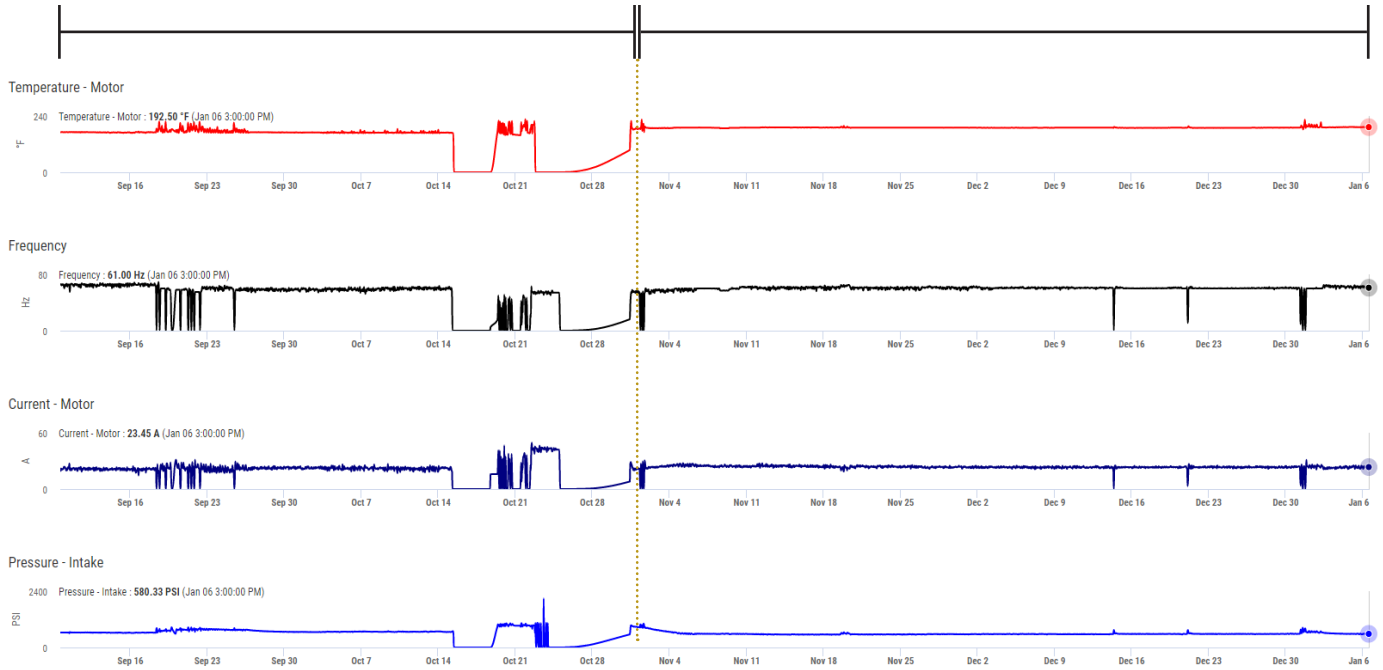
Multilift Solutions approached the Permian basin producer with the introduction of GasGuard™ as a technological solution to mitigate gas interference by lowering the GVF of the production stream to levels that an ESP and gas mitigating technology could manage without interruptions, costly downtime, or failures.

GasGuard™

CASE STUDY

ESP operation before GasGuard™

ESP operation after GasGuard™



Production before GasGuard™

Production after GasGuard™

