

InjectRT intelligent chemical treatment optimization service eliminated chemical related ESP failures extending run life targets in three Permian wells

CHALLENGES

- Achieving targeted ESP run lives on high flow rate wells subject to corrosion, scaling, and rapidly changing reservoir conditions
- Freeing up field personnel to focus on sampling, analysis, and chemical program optimization
- Maintaining continuous “visibility” and control of the chemical program in remote areas
- Reducing chemical consumption variances
- Addressing solar/battery power quality issues, especially at night
- Shutting down chemical ESP injection automatically when the well is shut down

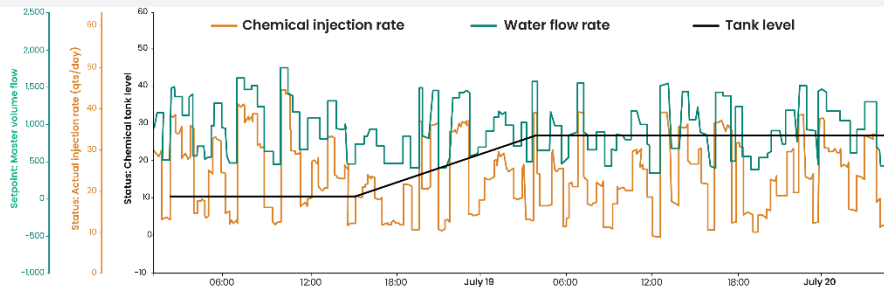
SOLUTION

[InjectRT™ intelligent chemical treatment optimization service](#) was implemented to:

- Instantaneously align chemical injection rates with ESP-derived virtual flow rates
- Automatically apply the appropriate chemical dose through intelligent injection controllers installed at the wellsite
- Eliminate manual intervention by automatically shutting down/restarting chemical pumps when ESP is down, sending alerts when tank levels need refilling, reporting on daily solar/battery performance
- Automatically perform quality checks/flow totalizing on injection pumps and recalibrate when needed

RESULTS

- Calculated water and oil production rates within 10 percent of recorded facility readings through ESP virtual algorithms
- Eliminated three wellsite visits a month and their associated fuel costs, vehicle wear and tear, and HSE risk
- Reduced manual intervention and chemical costs by automatically adjusting injection rates during periods of high gas volumes/gas slugs



The InjectRT service instantaneously aligns chemical injection rates with ESP-derived virtual flow rates