

# Pipeline Corrosion Mitigation Program

Application Sheet # 21

## REAL TIME **BENEFIT**

An 80% reduction in pipeline corrosion rates with reduced chemical consumption.

### SITUATION

- A midstream company in the Permian Basin sought to improve their corrosion loss program for remote pipelines.
- Corrosion coupons indicated metal losses of over 1.8 mils per year.
- Intermittent injection via traditional mechanically adjusted pumps resulted in pockets of untreated fluid through the pipeline.
- A pulsation dampener was added to reduce slugging through the atomizer nozzle.
- Chemical injection rates were increased in a failed attempt to overcome metal loss.

### SOLUTION

- A solar powered Sirius Fusion pump was installed to replace the existing DC mechanically adjusted pump.
- A flow meter was tied in to the pump controller to further ensure accuracy of injection and provide additional flow verification.
- The nozzles on the atomizer were properly sized for constant injection.
- The pulsation dampeners were deemed unnecessary and removed from the process, reducing complexity and cost.

### RESULTS

- The accurate, continuous injection of the Fusion pump resulted in complete media treatment, eliminating any untreated pockets.
- The corrosion rate was reduced from 1.8 mils per year to less than 0.3 mils per year.
- Chemical usage decreased due to accurate delivery and operator confidence.



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