

Controls to the Rescue

Application Sheet # 66

SITUATION

- A customer in North Dakota has "Frac Optimization Trailers" which inject chemicals into the frac fluid to reduce friction. The customer spent a significant amount of time manually adjusting rates based on downhole frac conditions. This included the time physically running between the frac house and the trailer to adjust injection rates.
- They were looking to optimize the process through automation and remote monitoring.
- Their pump supplier struggled with a solution to their request and provided a delivery which was unacceptable to the client.

SOLUTION

- After one call to Sirius, a solution was presented. Following the call, their Frac Trailer was delivered to the Sirius facility in Williston for upgrades.
- A Sirius Fusion^{2™} controller was added as the heart of the system. The existing pumps, flow meter, and viscometer were wired into the Fusion^{2™} Controller along with the Sirius Connect remote control platform.
- The viscosity, frac fluid flow rate and fluid density were used in an algorithm to optimize the injection rate of the friction reducer.

CUSTOMER VALUE

Rapid response, immediate solutions, and time savings with automated, accurate injections.

RESULTS

- Sirius Connect allowed real-time remote adjustments without manual intervention, reducing disruptions and improving overall efficiency.
- The instantaneous feedback led to improved control over injection and a more effective chemical program.
- Fluid characteristics can now be monitored locally as well as remotely in both North Dakota and Colorado, allowing more people to access the live process resulting in better decision making.
- Significant time savings, estimated at \$150,000 annually.

