

IMPROVING CHEMICAL CONTACT EFFECTIVENESS

REAL TIME BENEFIT

Increased sales gas revenue with fewer service calls.

SITUATION

- A pumper (operator) in West Texas was regularly having problems with high H₂S levels resulting in flare offs and loss of sales gas.
- The operator was injecting H₂S scavenger using traditional, long stroking chemical pumps; operated on a timer based controller, pumping through an atomizer.

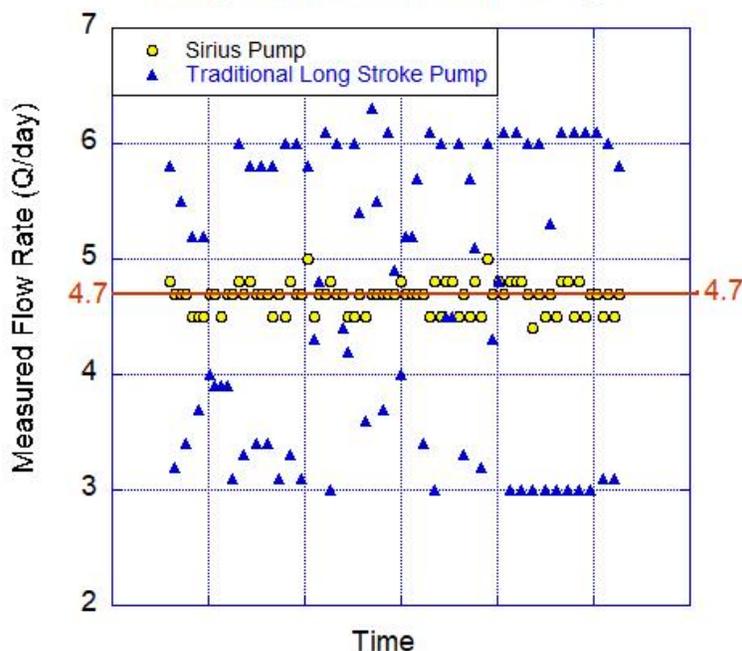
SOLUTION

- A Sirius Fusion chemical pump was installed to replace the traditional pump.
- The graph to the right demonstrates the difference in how two pump designs inject 4.7 Q/day. The flow rate of the traditional (long stroke) chemical pump is shown in blue triangles. By contrast the Sirius pump, shown in yellow circles, maintains a very consistent chemical injection rate.
- Theoretically both pumps could inject the correct volume over the course of the day if using the Sirius InSight or other feedback control system. However, the contact effectiveness will be significantly greater if the chemical is dispersed constantly and evenly across the medium as shown with the Sirius pump.
- The Sirius pump provides accurate, consistent and continuous flow. This permits the atomizer to operate as designed, providing better chemical contact effectiveness.

RESULTS

- The end user reported H₂S analyzer measurements lower than ever seen before.
- The operator had a decrease in service calls and an increase in gas sales.

Flow Rates Consistency of Long Stroke versus Sirius Design



Atomizer Operation

