

ULTRAFAB™ SERVICE AND TRAINING OPTIMIZES H₂S REMOVAL



SITUATION

An UltraFab customer operating in the Eagle Ford shale play in south Texas was measuring higher than expected chemical usage through their UltraFab Flooded H₂S Removal System. UltraFab service personnel were called to assess the situation and service the H₂S removal equipment.

CHALLENGE

Scavenger usage had increased and become more erratic with time. Some of the field operators were not familiar with the automated treatment features of the installed UltraFab Flooded H₂S Removal System and had bypassed the data analyzer in favor of manual operation. The data analyzer monitors outlet H₂S concentration and replenishes scavenger supply by automatically controlling the chemical pumps. Operating the pumps manually results in erratic chemistry usage, inefficient system performance and higher than necessary chemical cost.

SOLUTION

Proper training, routine system checks, and regularly scheduled preventive maintenance services all contribute to efficient H₂S removal, optimized scavenger usage and

reduced total cost of H₂S removal. A properly maintained H₂S removal system contributes to downstream asset protection and reliable on-spec production passing through the sales meter.

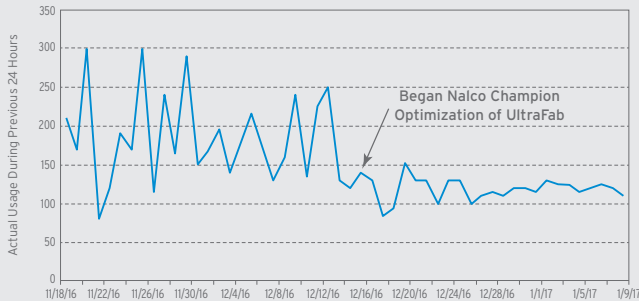
UltraFab service personnel coordinated and conducted mechanical services on the UltraFab Flooded H₂S Removal System. The maintenance work included:

- Warm water flushing of the contact tower
- Inspecting and replacing parts on the analyzer
- Servicing the chemical injection pumps
- Optimizing the injection pumps and analyzer set points
- Reviewing UltraFab system functions with field operations personnel

The service personnel also installed an analyzer upstream of the UltraFab system to measure inlet H₂S concentration. The upstream analyzer is not necessary for proper UltraFab system operation, but does enable logging of inlet H₂S concentration and facilitates calculation of real time H₂S removal efficiency.

RESULTS

Prior to servicing the UltraFab Flooded HVS Removal System daily chemical usage averaged 182 gal/D. Chemical usage after completing the service work averaged 118 gal/D - a 35% reduction. No less important was the significance of enabling the UltraFab system to automatically regulate chemical usage rather than relying on human intervention. Doing so prevents contactor fouling and ensures on-spec production and downstream asset protection.



USAGE PRIOR TO OPTIMIZATION = 182 GPD
USAGE AFTER OPTIMIZATION = 118 GPD
64 GPD REDUCTION

THE ULTRAFAB ADVANTAGE

The UltraFab Sweet 100 process removes 100% of H₂S from gas streams and effectively handles considerable fluctuations in operating parameters. The UltraFab design, coupled with Nalco Champion's technical expertise and wide-ranging field experience result in greater operational efficiency and lower chemical cost.

UltraFab solutions are available in a wide range of sizes and variations, treating gas volumes ranging from a few Mscf/D to several hundred MMscf/D and reducing H₂S concentration to virtually any outlet specification, including 0 ppm.

GOALZERO

SAFETY MATTERS

The safety of our associates, customers and communities is vitally important. From the way we operate, to the products we develop, to how we partner with customers, our goal is zero: zero accidents, zero incidents and zero environmental releases.

At Nalco Champion, safety is more than a metric, it's a mindset. It's how we conduct ourselves, every day, everywhere it matters.

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