

INDUSTRY: OIL & GAS | CUSTOMER: STREAMLINE | LOCATION: USA

ISSUE

This facility treats sulfur, and the main circulation line is designed to be able to treat 2500 gal/min and 29 000 lbs/day of it. However, due to obstructions caused by sulfur scaling, the flow was limited to just 900-1200 gal/min. This reduces the overall treatment capacity by more than 50%.

Removing this fouling cost the facility at least two days of production per cleaning, as the pipes needed to be taken apart and jetted with high pressure water. Each wash cost the facility around \$150 000.

The objective was to remove this fouling and restore flow to its full capacity without stopping production.

SOLUTION

- Altum's multichannel solution was installed on two different parts of the pipeline to ensure an even ultrasonic field and efficient removal throughout the whole pipe.
- Sulfur fouling removal is done with precise microscopic vibrations at the inner surface of the equipment to detach the foulant.
- Due to the versatility of Altum's solution, the customer was also able to utilize the device on other parts of the process to ensure smooth operations.

RESULTS

- While sonication was on, clear improvements could be detected quickly in the circulation flow, indicating obstruction removal.
- After 48 hours of sonication, circulation rate was measured to be 2400 gal/min = 100% increase.
- This improved flow rate translates to an extra 14 000 lbs/day of treatment capacity of sulfur at the facility.
- \$150,000 and 2 days of production saved on obstruction removal costs – Altum's solution does not require dismantling or additional equipment.



**LESS THAN 50%
FLOW CAPACITY
DUE TO FOULING**



**OVER \$2M*
PER YEAR
OVERALL BENEFIT**



**100% INCREASE
IN FLOW RATE**



**14 000 LBS/DAY
ADDED TREATMENT
CAPACITY**



**\$150 000 SAVED
ON OBSTRUCTION
REMOVAL COSTS**