

WATER INJECTION APPLICATION OF SCAVSOL® 50

THE PROBLEM

An oil and gas producer was experiencing iron sulfide and iron carbonate deposition in their oil and gas water flood system. The system was producing over 10,000 barrels of oil assisted with the injection of produced water for reservoir pressure maintenance.

The effects of iron precipitation and damaging iron scale formation on one injector resulted in estimated loss of revenue and increased costs for short-lived acid jobs.

The total cost to the operator with a reported 20% reduced efficiency on water injected over 200 injectors was calculated at over \$29,000,000/year in lost revenue from oil production in the entire field due to ineffective acid treatments and reduced reservoir pressure maintenance.

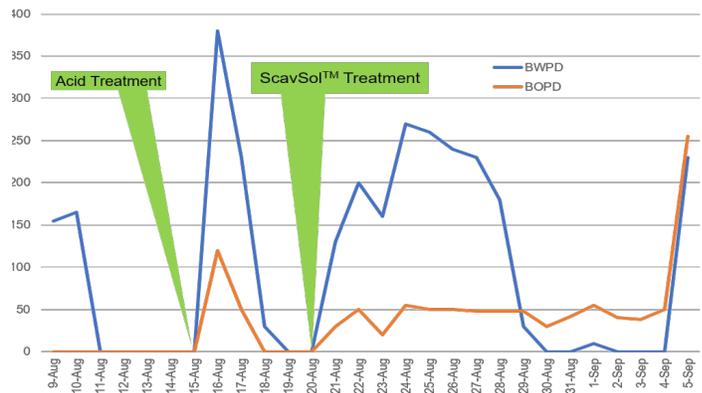
THE SOLUTION

Solugen provided ScavSol® extended iron control and on-site application expertise to remediate the existing near well bore fouling and eliminate the need for ineffective acid stimulation and increase the volume of water injected and, thereby, oil produced.

ScavSol® was applied to a targeted injection at a batch rate of 50 usg to remediate pre-existing iron deposits and control iron through-out the reservoir. Solugen monitored the system pre and post treatment for >20 days. ScavSol® was shown to increase the longevity of water injected at the maximum allowable operating pressure of 200 psi vs. traditional acid treatments. The client was able to capitalize on the increased volume of water injected and resulting oil produced.



ScavSol™ Case History



ScavSol® increased the volume of water injected at comparable pressures and crude oil produced for 15 days. Injection water was shut off for 7 days for injector charge pump maintenance. When injection resumed oil production on the producers exceeded expectations on restart.

VALUE DELIVERED

Solugen remediated the pre-existing iron deposits in hours and returned the facility to optimum operational performance with an estimated annual savings to the customer over \$402,000 for this single well application considering increased oil production and reduced spend on stimulation.

ScavSol® provides value to oilfield operations to remediate and prevent iron scale formation and deposition which eliminates additional costs associated with traditional acid stimulation treatments.

