



RSI-673 Improves Conditions in Water Storage Tanks And Increases Pumpability of Water in Salt Water Disposal System

History

Salt water disposal system in Brookshire, TX was previously treated by competitor chemical company. Operator had seen rising injection pressure and increased bio-fouling in storage tanks after repeated service calls and chemical modifications.

Issues

Water storage tanks had developed thick pads of black sludge on top that tested greater than 10,000,000 cols/mL of SRB. Water analysis revealed 10,000 cols/mL of planktonic general aerobic bacteria. Injection pressure was coming close to permitted level.

System Conditions

This salt water disposal system injected 8,000 – 10,000 BBL/day, 90,000 chloride ppm brine. Incoming water averaged 1,000 cols/mL SRB and 0 cols/mL general aerobic bacteria. System temperature averaged 110°F. Corrosion LPR probe installed by RSI indicated >30 MPY (mils per year) at the injection well head. Injection pressure was 800 PSI.

Recommendations

After initial field survey, Refinery Specialties, Inc. recommended RSI-673 Water Treating Chemical be injected continuously into the salt water pipeline before the first water tank in the battery. Recommended dosage was 72 ppm. RSI recommended monthly water sampling, monthly quantitative bacterial fouling analysis and 90 day coupon monitoring.

Results

Within 1 week of starting treatment with RSI-673, injection well head pressure had come down to less than 750 PSI and the sludge pad on top of the water holding tanks had visually decreased. 30 day testing had shown fouling as measured by sulfate reducing bacteria down to 10,000 cols/mL and fouling as measured by general aerobic bacteria down to 0 cols/mL

After 7 years of treatment with RSI-673, tank fouling and rising injection pressures are no longer issues for the site operator.