

Effective Iron-in-Oil Removal to Improve Oil Quality & Profitability

Midstream saltwater disposal (SWD) operators face rising challenge of gathering, storing and shipping off-spec oil. Oil contaminants such as iron can lower quality, increase costs, and reduce throughput, ultimately impacting the bottom line.

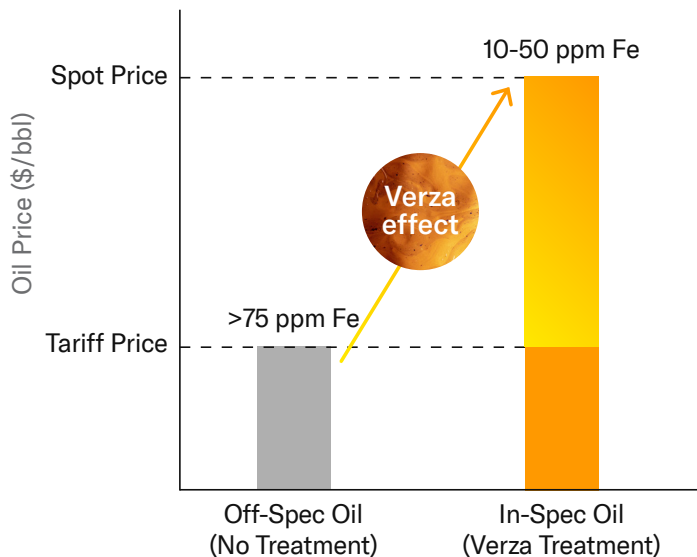
Verza360 is a series of multifunctional, organic acid-based chelating agents that enable high iron control and cost efficiency across the oil and gas value chain. It can be used as a complement to or replacement for traditional chelating agents, such as THPS, EDTA, and citric acid.

In SWD systems, iron can:

- ✓ Reject oil, salability, and profitability
- ✓ Bottleneck oil movement and operation
- ✓ Increase maintenance costs and NPT to meet spec
- ✓ Lead to unsafe exposure to H₂S and corrosive chemicals
- ✓ Cause loss of revenue (deductions)
- ✓ Increase risk of production/disposal curtailment
- ✓ Lead to poor SWD system performance
- ✓ Create costly expenses for storage tanks

The use of Verza360 can lead to:

- ✓ Highly selective iron removal
- ✓ More effective treatment with or without wash water
- ✓ Debottlenecked inventory, enabling oil movement and gathering to facility
- ✓ Custody transfer of marketable oil
- ✓ Reduction of other divalent metal contaminants



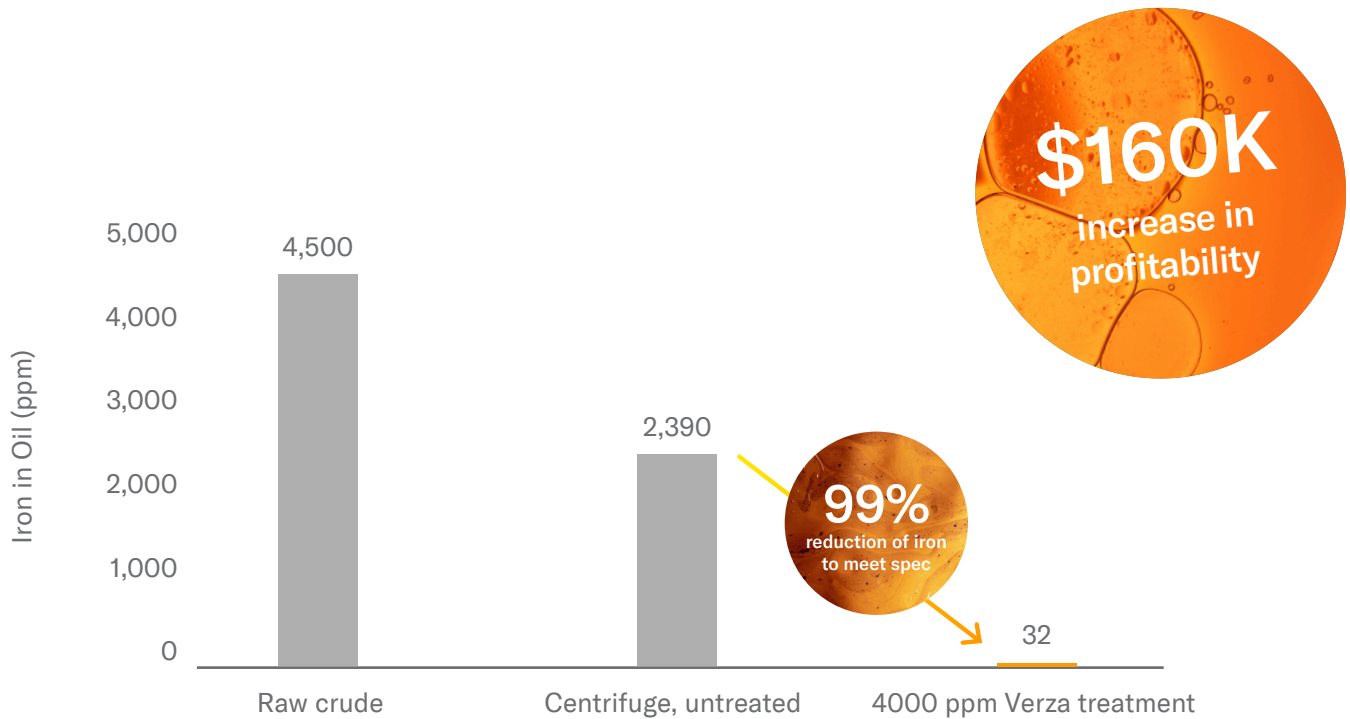
Proven solution to mitigate off-spec deductions and improve profitability

Solugen

Case Study: Increased Profitability Off Eagle Ford Oil

A midstream trader was achieving marginal performance in treating off-spec oil containing 4,500 ppm Fe to <50 ppm for sale. The incumbent program, consisting of highly corrosive chemistries, heat, and centrifugation, resulted in operational hazards, pump failures within 24 hours of replacement, and significant reductions in throughput and profitability.

Verza360 was deployed alongside a cationic surfactant as a more effective and safe solution to meet spec, debottleneck off-spec inventory, de-risk curtailment of incoming oil loads, and recover the highest value for the oil.



For a complete case study or additional information on our Verza360 product line, visit solugen.com/oilandgas or contact us at energysolutions@solugen.com. Pricing available upon request.