



T2TM Performance Results

The following are actual field applications where novel, proprietary chemistry has been effectively used to replace THPS, Oxidizers, and other competing chemicals to treat Iron Sulphide and Iron Oxide laden water and oil.

Trial Case #1 - South Texas SWD Well - Same Water



Competitors Treatment



T2 TREATED - 20 HOUR REACTION

- Gradual reduction of tank bottom solids, and complete elimination of the need to haul away bottom solids that used to accumulate
- Filter changes reduced from 6 8x per day to once
- Injection pressure reduced from 2400 psi to < 2000 psi
- Water volume increased from 8000 to 12,000 BBL per day without raising injection pressure
- · Increased oil recovery
- Led to expansion of treatment to 6 other SWD locations

Trial Case #2 - South Texas SWD Well - Same Water



INFLUENT SWD WATER



T2 TREATED - 4 HOURS REACTION

- Customer's SWD was designed to handle 3500 BBL fluid per day, but was able to dispose of 16,000 BBL per day using T2 treatment
- Oil recovery consistently at > 200 BBL per day at < 2% BS&W without any other chemicals in use
- \bullet Oil in disposal water was < 300 ppm despite the limited retention time

Trial Case #3 - South Texas SWD Well - Same Water



WATER ON DAY 1 OF T2 TREATMENT



WATER ON DAY 5 OF T2 TREATMENT

- Treatment of 12 15,000 BBL per day
- Consistent oil recovery of 200 300 BBL per day at < 4% BS&W without the use of demulsifier
- Pressure consistently maintained at below their permitted injection level
- Significant reduction in filter changes due to reduced solids
- At least 6 different chemicals were tried prior to T2 treatment without success, including 3-4 at a time

In total, several million BBLS of Iron Sulphide fouled fluid has been treated with T2 chemistry and consistently delivered substantially better results vs. competing treatment programs. In many cases 3 – 5 chemicals were replaced with our single product. The success of the treatment has been expanded to multiple locations in other regions.

Trial Case #4 - Production Water Goal: Filter then Treat so it can be used for Frac



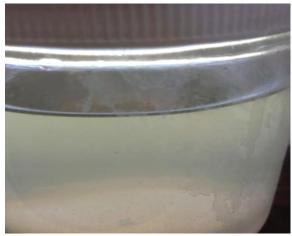
SAMPLES AT PRODUCTION TANK



SAMPLES AFTER SRB GENERATE H2S



T2 TREATED - BEFORE FRAC TANK



FILTERED & T2 TREATED

- Initial project involved Treating 75,000 BBLS of water in 5 days.
- T2 application has been mandated company wide
- Minimal filtration was required

It should also be noted that T2 chemistry is proven to **inhibit** the formation of Iron Sulphide. Therefore, it should be used as a *preventative* treatment where conditions susceptible to scale formation exists.

Supporting evidence of this has been generated in numerous instances, leading to its use in production treating chemicals.

T2 - Highly effective against Iron Oxide solids

Trial Case #1 - Production Water with Iron Oxides



UNTREATED

T2 TREATED

Trial Case #2 - Production Water with Iron Oxides



UNTREATED

T2 TREATED

Note the clarification and near elimination of any particulate from the fluid. T2 chemistry is able to form a strong and stable complex with Iron to clean existing deposits and prevent deposition from occurring.