Oil-Water Separation with PeroxyMAX™

Eagle Ford production water with high oil fraction

PeroxyMAX is a proprietary, highly active and selective oxidant synthesized on-site, on-demand from safe feed stocks. PeroxyMAX treatment helps break emulsions for improved oil recovery.

Oil-Water Separation Testing, Results

- 2 L fluid volumes used - larger scale jar tests.
- The oil-water mixture was emulsified by high shear mixing for two minutes.
- Separation was monitored over 20 minutes by measuring the heights of interfaces in the fluid column.

O/W Separation Rates: Oxidant-treated fluid had approximately 10x faster rate of separation of bulk oil and water fractions in the first two minutes of separation.

Emulsified Impurities Separation: Oxidant-treated fluid had an emulsified “junk” layer separate from the oil fraction about 15x faster than untreated fluid. The emulsified “junk” layer was about 30% less volume than for un-treated fluid.

Enhanced Oil Recovery: Oxidant-treated fluid provided greater oil recovery over un-treated fluid.