IDEA[™] **Update**

Sour Water Stripper Optimization

PROJECT BACKGROUND:

PROCESS SYSTEM: 400 GPM Sour Water Stripper Unit

OPERATING CHALLENGE: Heat exchanger fouling, high energy cost, hydrocarbon carryover to SRU

OPERATING IMPACT: \$500,000 per yr. in HX cleaning and energy costs, SRU consumption, etc

TORSEP™ ADVANCED EMULSION SEPARATION SYSTEM:

ENDUR PRIMARY STAGE: Solids removal

ENVISION SECONDARY STAGE: High efficiency, emulsion capture, growth and separation

OPTIMIZED OPERATING COSTS: Efficient solids removal reduces overall element replacement costs







RESULTS:

HX FOULING: Run life extension from 6 months to 60 months.

OIL RECOVERED: Diesel grade oil recovered.

ELEMENT REPLACEMENT: Average online life > 8 weeks for ENDUR solids removal.

REDUCED OPERATING COSTS: Reduced HX cleaning events and exposure.

REFINERY OUTPUT: Improved SWS reliability reduced the risks of refinery output reduction.

PAYBACK PERIOD: < 12 months.

