

PROJECT BACKGROUND:

PROCESS SYSTEM: 100,000 BPD NGL Train, amine treated, molecular sieve dehydration before fractionation.

SHORT BED LIFE: Molecular sieve beds require replacement every 6 - 8 months.

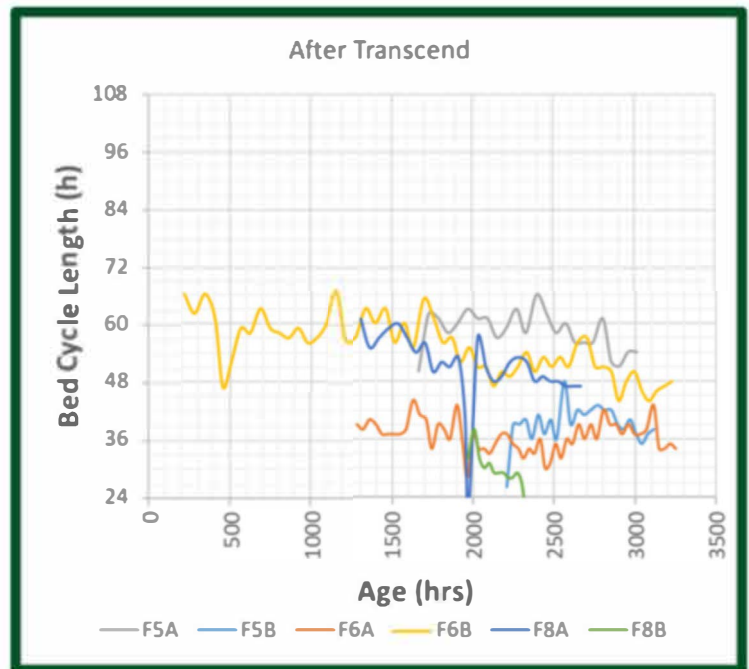
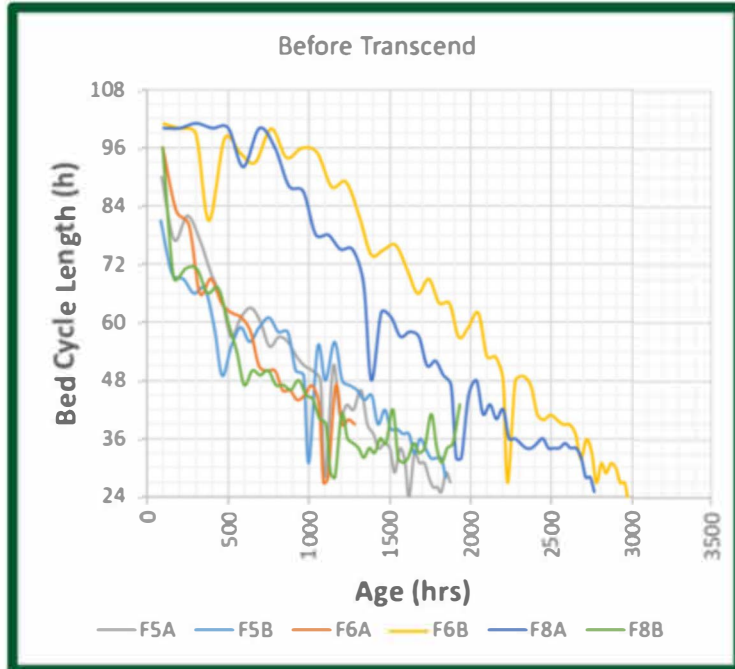
OPERATING IMPACT: \$500,000 per yr. in molecular sieve cost + risk of exposure and safety.

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:

BED LIFE: Bed cycle length stabilizes Run life extended by 4 - 5x.

SEPARATOR COSTS: Improved fluid quality with lower replacement costs.

CAPITAL COSTS: None.

DOWNTIME: None

PAYBACK PERIOD: 2 Months.

RISK REDUCTION: \$500,000 per TRAIN per YEAR