



# CLEAR SOLUTIONS for complex fluids

## Subsea Production Flowline Flooding



### CHALLENGE

- Subsea production flowline flooding for hydrotest



### SOLUTION

- CETCO Energy Services (CETCO), utilized chemical injection umbilical lines with 50/50 methanol and water mixture



### RESULTS

- CETCO minimized customer cost by not needing an intervention vessel

# Subsea Production Flowline Flooding

## CHALLENGE

A Gulf of Mexico operator was required to hydrotest a subsea production flowline for re-commissioning. The operator sought a package from CETCO that was capable of performing the flowline flooding portion of this scope of work.

## CETCO SOLUTION

Flooding the flowline from the bottom up was critical in this operation because it would allow for the highest probability of success when performing the hydrotest. In an effort to minimize cost, CETCO suggested accomplishing this in a manner that would prevent the operator from having to charter an intervention vessel. CETCO proposed utilizing two of the well's chemical injection umbilical lines to flood the flowline with a 50/50 mixture of methanol and water.

## RESULTS

CETCO designed a system that was capable of desalinating sea water and combining it with methanol while on location. Utilizing CETCO's chemical injection package to filter the combined fluid below a NAS 6 cleanliness level, CETCO was able to utilize the same package to inject the fluid into the umbilical lines at a rate of ~4 gallons per minute. By continuously operating this system with zero down time, CETCO was able to completely flood the flowline with 140,000+ gallons of fluid over the course of 22 days.

