

Water Treatment Case History

## Heat Medium Solutions - TUNA

### Challenge

CETCO Energy Services was requested by a major Gulf of Mexico operator to provide a heat medium for a high pressure heat exchanger on a P&A gas flow line to heat produced gas prior to it entering the sales line. Due to the subsea nature of the well, the temperature of the gas going to the sales line needed to be at least 40° F to prevent hydrates from forming.

### CETCO Solution

CETCO Energy Services provided the TUNA, our self-contained flameless heat exchanger developed to heat produced fluids where conventional open flamer heaters are not permitted. The TUNA uses captured heat from the hydraulic system, engine cooling system and engine exhaust. The recovered heat is transferred to a non-hydrocarbon based heating fluid that supplies heat to the high pressure gas heat exchanger. The TUNA heat transfer fluid prevents the produced fluids stream from directly contacting a heat source which is a significant safety feature.

### Outcome

Over the seven month period of this operation, an average temperature range of 75 - 85° F was maintained on the gas sales line and prevented hydrate formation. The TUNA heater performed at 100% uptime on its deployment.

