



# CLEAR SOLUTIONS for complex fluids

## Heat Medium Solutions - TUNA™



### CHALLENGE

- Provide a high pressure heat exchanger for gas sales line



### SOLUTION

- CETCO Energy Services (CETCO), self-contained flameless heat exchanger, the TUNA™ unit



### RESULTS

- The TUNA™ unit maintained 75° to 85°F for seven months and prevented hydrate formation

## Heat Medium Solutions - TUNA™

### CHALLENGE

A major Gulf of Mexico operator requested we 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 provided the TUNA™, self-contained flameless heat exchanger unit developed to heat produced fluids where conventional open flamer heaters are not permitted.

The TUNA™ unit 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.

### RESULTS

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.

