



CLEAR SOLUTIONS for complex fluids

Treating Hydrostatic Test Water - Minnesota



CHALLENGE

- Dewater pipeline from refinery to render operational before refinery shut down production due to out of service pipeline
- NPDES permit discharge criteria testing required hourly, around the clock, throughout the duration of the project due to recent local environmental incident



SOLUTION

- Mobilize large equipment package, technicians, and engineers to Minnesota from Louisiana
- Provide onsite laboratory for testing discharge parameters around the clock



RESULTS

- Safely treated and discharged all water from pipeline resulting in pipeline becoming operational in time without shutting down the refinery
- Laboratory testing proved all water discharged to environment was in compliance with permit

SUCCESS STORY

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CHALLENGE

A pipeline company in Minnesota conducted a hydrostatic test of its pipeline, producing approximately 320,000 BBLS of fluid for treatment. The hydrostatic test water to be discharged into a nearby field had to meet the following criteria:

Parameter	Discharge Criteria
Benzene	10 ppb
Ethyl Benzene	700 ppb
Toluene	1,000 ppb
Xylenes	1,000 ppb
Oil & Grease	*

CETCO SOLUTION

Fluid was pumped from the pipeline into three storage tanks located at the pipeline's tank farm. Fluid was then pumped from the storage tanks directly to **CETCO ENERGY SERVICES, (CETCO)** onsite equipment. On average, CETCO treated the fluid at a rate of 10 to 15 BBLS per minute. Rates as high as 20 BBLS per minute were achieved. CETCO's process discharged about 15,000 BBLS of clean water per day.

RESULTS

The project was completed in 30 days, with CETCO treating and discharging 320,000 BBLS of water. CETCO personnel continuously monitored the clean water using an onsite laboratory to ensure all discharge criteria were met.

The following table illustrates the effectiveness of CETCO's process:

Parameter	Infuent	Effluent
Benzene	3,630 ppb	< 5 ppb
Ethyl Benzene	210 ppb	< 5 ppb
Toluene	3,180 ppb	< 5 ppb
Xylenes	940 ppb	< 5 ppb
Oil & Grease	17.79 ppm	< 5 ppm

