



CLEAR SOLUTIONS for complex fluids

Offshore Oil and Water Storage Capacity



CHALLENGE

- Large fluid volume with limited storage and deck capacity



SOLUTION

- Supply 500 bbl tanks on workboat with filtration package



RESULTS

- Cost-effective, space-saving, and API 14C compliant

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CHALLENGE

The Client drilled a dual-zoned oil well in the deep water market of the Gulf of Mexico and contacted CETCO Energy Services (CETCO), to make all necessary arrangements for completion operations. The well test objectives were to safely test completion integrity while acquiring reservoir properties, with a lower zone target fluid rate of 2,000 bbl/day, and an upper zone target rate of 4,000 bbl/day. After an initial Client meeting and site survey, the greatest challenge on the semi-submersible moored drilling facility was fluid storage, due to limited deck capacity and deck area, combined with logistical challenges.

CETCO SOLUTION

A cost-effective three-phase separation process was identified. After separating and measuring well effluent, gas phase hydrocarbons would be burned, liquid hydrocarbons would be transferred to six 500-bbl tanks on a supply vessel, and water would be discharged overboard.

CETCO's Water Treatment division filtered all recovered water to a 10.2 PPM IR (max GOM requirement: 29 PPM IR). Meanwhile, CETCO's Well Testing division transferred oil overboard to six 500- bbl tanks on a work boat. A hose reel and cradle were positioned on the drilling rig to transfer fluid overboard to the workboat.

The overboard transfer hose was equipped with a Coast Guard Approved Safety Breakaway Coupling to limit fluid discharge in the event of a boat drive-off. A flare scrubber was installed between the separator and the flare boom to reduce the risk of fluid carryover to the flare. The entire package was designed in accordance with API 14C.

RESULTS

The combined services of CETCO's Well Testing and Water Treatment divisions provided a space-saving, cost-effective solution, which met the Client's test objectives, and exceeded government requirements.

