

# CLEAR SOLUTIONS for complex fluids

## Contaminated Water Treated During Pipeline Flushing in North Sea



### CHALLENGE

- An Operator needed to treat and discharge its contaminated water returns during a pipeline flushing operation



### SOLUTION

- Customer requested **CETCO ENERGY SERVICES, (CETCO)** to treat the contaminated water from the pipeline flushing operation using its patented water treatment technologies



### RESULTS

- Removed hydrocarbons with an oil removal efficiency of 97.5%. CETCO was able to provide Customer with a cost-effective, robust system that efficiently treated its water, and then discharged the cleaned water in full compliance with regulatory requirements

**SUCCESS STORY**

# Contaminated Water Treated During Pipeline Flushing in North Sea

## CHALLENGE

Helix Well Operations needed to treat and discharge its hydrocarbon contaminated water returns during a pipeline flushing operation in Maersk Oil's Gryphon field onboard the Helix Seawell light well intervention vessel.

## CETCO SOLUTION

Helix requested CETCO Energy Services, (CETCO) to treat the contaminated water from the pipeline flushing operation. CETCO utilized its patented water treatment technologies – Hi-Flow® and CrudeSorb® media, to filter and process the produced water. The treated water was discharged overboard and complied with the regulatory requirements.

CETCO mobilized a Hi-Flow® IFV-4000 skid coupled with a CrudeSorb® RFV-4000 vessel downstream. CETCO treated and discharged 9,327 BBL (1,483 m<sup>3</sup>) of produced water in the duration of the treatment.

## RESULTS

CETCO package was excellent in removing hydrocarbons with an oil removal efficiency of 97.5%. The average oil-in-water (OIW) sample inlet was 238 ppm whilst the overboard discharge average concentration was 5.8 ppm. Only one set of consumables was used for the duration of the project. CETCO was able to provide Helix with a cost-effective, robust system that efficiently treated its produced water, and then discharged the cleaned water in full compliance with regulatory requirements.

*"The CETCO crew we had onboard during our last project carried out a lot of work on a pretty challenging job where the returns were much higher hydrocarbon content than expected. Your crew worked very hard and safely throughout the job and we had a great 'can do' attitude throughout and I cannot commend them and your equipment enough for helping with the success in this particular project."*

– Kevin Laing, Offshore Project Manager, Helix Seawell.

