

CLEAR SOLUTIONS for complex fluids

Wet Monoethylene Glycol (MEG) treatment on the natural gas production platform



CHALLENGE

- Low MEG lifetime and high cost with subsea pipeline maintenance



SOLUTION

- CETCO Energy Services (CETCO), South America team connected MEG regeneration/recovery process on a major oil platform in Brazil



RESULTS

- Improvement in the MEG regeneration / recovery process enabling the increase in natural gas production

Wet Monoethylene Glycol (MEG) treatment on the natural gas production platform

CHALLENGE

A major oil company in Brazil launched a new gas production platform that was designed to produce up to 15 mm m³/d of natural gas and 20 k bbls/day of condensed, the platform features a full Monoethylene Glycol (MEG) recovery and regeneration system that is critical to the well-functioning of the platform production. Upon the first months of production, the platform was consistently below the expected production performance and suffering from constant down times related to subsea pipeline maintenance and MEG inventory make over. The production stream consist mainly on natural gas, water, and condensate, a side of that MEG is also added for hydrate prevention.

The MEG injection on gas producing wells is an efficient method for hydrate prevention on the subsea pipelines. The main hurdle the platform was facing is related to the contamination of the MEG stream upon returning to the surface. The MEG (now considered wet MEG due to the water content in it) and condensate portion were largely contaminated with paraffin and other substances.

CETCO SOLUTION

CETCO was called upon to present a technical solution to increase the MEG regeneration plant efficiency as well as to reduce the costs with MEG make over. After performing

an onsite survey to determine the best available technology for the project, a CETCO patented Hi-Flow[®] Advanced Coalescing Technology unit was installed assuring a consistent 80% efficiency of condensate and other contaminants removal from the wet MEG stream.

RESULTS

CETCO Hi flow[®] Advanced Coalescing Technology system increased the platform separation system efficiency by handling the wet MEG excess load of condensate and contaminates, this has allowed the platform to increase the natural gas production, as well as extended the life span of the MEG used in recovery process.

Another major benefit to the platform is related too much lower frequency of down time for system maintenance, related to poor MEG quality/efficiency achieved after CETCO Hi flow[®] unit installation. The CETCO proprietary system as been operating on the platform since 2013, and is currently fully integrated into the platform production process and is being considered essential to maintain good and stable results.

