



Case History: Brownfield Improvement



48" CrudeSep

Hydrocyclones and CrudeSep®

Problem:

The Angsi A platform in the South China Sea had cracked its existing Hydrocyclone vessel. The company approached CETCO Oilfield Services – Malaysia for a temporary fix, and then again for a long-term solution to its onboard produced water treatment.



2 x 24" Hydrocyclones

Solution:

CETCO Oilfield Services mobilized a Hi-Flow™ rental package to replace the malfunctioning Hydrocyclone and maintain the platform's production. Following the rental's success, CETCO designed, and installed two 24" Hydrocyclones and a 48" CrudeSep® compact flotation vessel to solve their produced water treatment problem with a permanent solution.

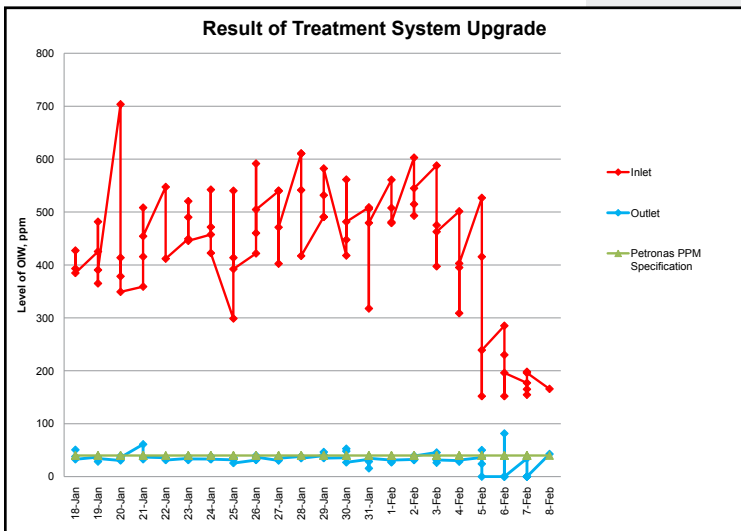
Method:

The Hi-Flow™ equipment could accommodate flow rates of 70,000 bbls/d and treat produced water inlet flows up to 1000 PPM oil-in-water and achieve overboard discharge quality of less than 40 PPM. The platform also experienced sanding issues, so the Hydrocyclone liners were coated with tungsten carbide to prolong their life span.

This permanent package had to fit in a congested area, so CETCO utilized and modified the existing structure when designing the new equipment. The Hi-Flow™ rental unit was in place, allowing for uninterrupted platform production, as the permanent equipment was installed in phases; first installing the Hydrocyclone vessels, then the CrudeSep® polishing unit downstream.

Outcome:

The effluent quality met and exceeded overboard discharge requirements and was subsequently discharged overboard. Throughout the process, as a result of using the Hi-Flow rental package, the platform experienced no operating downtime before or during the replacement of the permanent water treating package thus preventing lost revenue. CETCO Oilfield Services' performance was recognized by the company for minimizing their chemical usage, and allowing maximum production flow rates.



WATER TREATMENT | PIPELINE | WELL TESTING | WASTEWATER | NITROGEN | COILED TUBING



**CETCO
OILFIELD
SERVICES**

Covington, LA USA +1 985 871 4700
 Houston, TX USA +1 281 578 8911
 Africa +44(0)791 783 8316
 Australia +61(0) 893 160122
 Malaysia +603 216 206 95
 Middle East +968 245 80219
 UK +44(0)1224 787340
 Brazil +55 21 2524 4035

cetcomonarch.com
cetcooilfieldservices.com