

Reclaimed Oil Tank Separator

Proof of Concept Test

Targa Resources - Houston, TX USA, 2016

Problem

Black Powder wear contamination in reclaimed oil was gravity fed to the high pressure flash tanks, the de-mister sections of compressors and finally the coalescer.

- (1) Traditional filtration prior to the compressor sump is unable to efficiently filter Black Powder. This wear contamination damages seals, pump components and compressor components which requires costly, frequent maintenance.
- (2) Traditional filtration bypasses the bulk of Black Powder solids when it reaches saturation.

Test

1. Install the BPS Magnetic Separator System in a drain line in the discharge.
2. Route the hose to a vent in the destination tank.
3. Record results after 3 minutes, 10 minutes and 1 hour.

Recommendations

Install the BPS Magnetic Separator on this system to clean the reclaimed oil before it returns to the compressor. As a further preventative measure, it is recommended to also install a Black Powder Solutions Magnetic Separator on the feedstock line into the facility, thereby protecting all systems in the process.



Reclaimed oil tank.



Black Powder contamination captured after 3 minutes.



Black Powder contamination captured after 10 minutes.



Black Powder contamination captured after 1 hour.