

## Transmission Line Pump Protection Black Powder Removal

Rubiales Pipeline Transfer Pipeline Pump Protection  
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### Problem:

Black Powder contamination in the pipeline oil between the transfer station and tanker truck loading processes caused pump failure and the degradation of oil quality. Black Powder causes corrosion of carbon steel components and eventual pump failure.

### Solution:

Cesar Gomez R. of Filter Master Colombia S.A.S. recommended installing a BPS Magnetic Separator in the existing basket strainer before the pump to remove the Black Powder to sub-micron level and improve product quality.

### Results:

ECP Plant Chief Engineer Jessica Sanches and ODL Maintenance Technical Engineer Support Engineer Fabio Soto were very pleased with the results as the removal of the large amounts of Black Powder will have a positive impact on product quality, reducing wear of the system components. After employing the BPS Magnetic Separator for two years with excellent service, Mr. Soto has now ordered the installation of 24 more magnetic separators in their pumping stations.

### Recommendation:

Install BPS Magnetic Separator technology in place of depth media filters to realize cleaner gas, less flow restriction, reduced maintenance costs on valves, flow meters, and extended pipe wall life thereby improved production integrity of the pipeline.

