

# Propane Pump Protection

Texas, USA / 2019

## Problem

Propane is being piped from underground storage in Port Arthur, TX to Mt. Belvieu, TX from time to time. The propane is usually used as burner fuel, but when there is excess and/or market conditions dictate, it is pipelined, so the pump may be idle for extended periods. It often locks up when it is running and each time, the issue has been black powder contamination getting into the balance bushings and wear rings, causing imbalance and vibration that eventually shuts the pump down.

## Solution

The plant manufactured a spool piece to hold a temporary BPS magnetic filter element in the pipeline on the suction side of the pump.

## Results

The pump ran smoothly during the next run period, without interruption.

The customer is now proceeding to order a duplex BPS magnetic separator system to ensure it is always has magnetic separation capability during pump run periods.



Contamination collected after 10 days