



# Dissolved Salt Removal Using PEACH Gemini PuraSep® Filter-Coalescer

Market Application Publication

# BACKGROUND

Customer has developed a gathering field including one centralized booster compressor station. This compressor station has (3) trains each capable of 250 MMscfd flow. Each train consists of an inlet slug catcher followed by an inlet filter. The gas then flows through CAT 3616/Ariel compressors. After the compressors is a cooler followed by a vertical coalescer. Gas then flows through a Glycol dehydration tower and another vertical coalescer to capture any glycol carrying over. The gas then leaves the facility to be further processed or used. The wells feeding this gathering facility have high amounts of calcium chloride (salt) dissolved in the fluid entering the facility. This salt, if allowed to make its way into the compressor, will crystalize in the compressor valve when heated up and start to plug off the valves. Thus, reducing efficiency and performance of the compressor. To remove the salt from the system the customer must remove all the liquid since the salt is dissolved in the liquid. The customer was having the salt make it by the competitor inlet filter and get into the compressors. They were having to shut in at least once a month to change out compressor valves and clean the compressors. Each change-out took a minimum of one full workday. The cost was substantial in compressor valves, labor and loss of 750+ MMscfd gas flow in a day.

# SOLUTION

Parker IPF sales team worked with the customer and IPF engineering team to evaluate the best possible approach. Based on having had previous success in the same application, utilizing customer references and presenting field testing, Parker IPF recommended the PEACH Gemini PuraSep. The customer had used the Gemini in one previous application before and they were impressed with its performance. They decided to replace the inlet filters before the compressor with Gemini's, and to date there have been no issues with salts in the compressor valves.

## Benefits to Customer:

- Gemini PuraSep has tool-less cartridges compared to the competitor design, making change-outs more user friendly.
- Solids loading of the Gemini filters has resulted in less change-outs compared to the competitors.
- Exponential cost savings in compressor valves increases profitability of the organization.
- Preventing shutdowns to change compressor valves results in higher efficiencies and lower maintenance cost.
- Ensured the customer an additional 750+ MMscfd transportation by not having to be down a day or more for maintenance.
- Gemini resulted in 80% fewer change-outs compared to the competitions vessels. Competitor filters had to be changed at every shut-down.

# HIGHLIGHTS

**Application:** Gathering Compressor Station

**Location:** Marcellus/Utica Shale, USA

**Products:**

- PEACH Gemini PuraSep®
- PEACH® Gemini (PGC Series Cartridges)



**Actual salt build-up inside of compressor cylinder before installing Gemini vessels**

