CASE STUDY • REFINING

TRANSPORT COMPANY IMPROVES OPERATIONAL EFFICIENCY IN WATER TRANSPORT FLEETS WITH LEVEL MONITORING

Customer

High Plains Transport (North America)

Application

Produced water level monitoring on hauling tank trailers

Challenge

High Plains Transport operates a fleet of produced water hauling tank trailers serving upstream oil and gas operations. The company relied on automated volume monitoring systems installed across part of the fleet, but these systems were increasingly unreliable and costly to maintain. Several units had begun to fail, requiring frequent manual intervention and data entry.

In addition to replacing the failing systems on 20 existing trailers, High Plains Transport wanted an economical, scalable way to expand automation across the rest of its fleet. To identify the most effective path forward, Emerson worked closely with High Plains Transport to better understand their application requirements and operational challenges. An Emerson representative met directly with the company owner to understand how produced water transport operations were running, including workflows and data needs.

These discussions helped Emerson and the customer align on a solution approach tailored to their specific fleet requirements.

Results

- Accurate, real-time monitoring enabled without manual data entry
- Reduced maintenance costs by replacing failing monitoring systems
- Improved measurement reliability supporting more efficient fleet operations.

Image 1. *Rosemount™ 3408 Non-Contacting Radar Level Transmitter installed on hauling tank trailer.*

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Solution

During the onsite meeting, the Emerson representative demonstrated the Rosemount 3408 Non-Contacting Radar Level Transmitter on a tank located in the customer's service bay. Using the AMS Device Configurator mobile app, the representative guided the High Plains Transport team through device setup and configuration.

The customer was immediately impressed by the intuitive app interface and the simplicity of configuring the device without complex tools or manual data entry. However, one challenge remained: transmitting the Rosemount 3408 volume signal to a third-party application using Bluetooth® wireless technology communication.

To address this, Emerson created a low-cost, PLC-based interface that converts the Rosemount 3408's 4–20 mA output and makes the signal available through Bluetooth wireless technology. The Bluetooth communication box is assembled by the Tank Monitoring group's panel shop and bundled together with the Rosemount 3408, creating a one stop solution for the customer. This custom communication setup enables seamless integration with the customer's existing third party application while keeping overall system costs low.

Today, High Plains Transport operates 31 Rosemount 3408 Non-Contacting Radar level transmitters across its fleet, which communicate through this custom communication solution using Bluetooth wireless technology. This scalable, cost-effective setup provides reliable, real-time volume measurement on produced water tanker trucks and has already proven its value by supporting more efficient, cost-effective operations.

Resources

Rosemount 3408 Non-Contacting Radar Level Transmitter
Emerson.com/Rosemount3408

For more information,visit
Emerson.com/Rosemount3408

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