

TankScan Transports Savings for T & R Oil Company



T & R Oil Company supplies full-service Diesel Exhaust Fluid (DEF) solutions to the greater New Jersey area. From bulk 4,000-gallon transport loads to 330-gallon totes for small bulk deliveries, T & R Oil supplies DEF to trucking companies throughout Connecticut, New Jersey, New York, Delaware, Massachusetts and Pennsylvania.



Applications:
Remote Tote Storage

Market:
Diesel Exhaust Fluid

Challenge

Differential pressure sensors are a common method for monitoring liquid levels. T & R Oil was relying on this technology to manage the DEF inventories in its network of tanks. However, for T & R Oil Company, installation conditions needed to be perfect to obtain an accurate reading.

“We had about a 40% fail rate using our previous differential pressure sensor,” said Dominick Tullo, Vice President of T & R Oil Company. “The differential pressure sensor was frequently telling us that there was more than the tank actually had which resulted in costly run outs, forcing us to do dead heading runs.”



Solution

T & R Oil Company wanted a solution that utilizes ultrasonic technology instead of differential pressure, so the company invested in TankScan. They chose the TSU1000 ultrasonic monitor, an inclusive 4G LTE cellular tank level solution providing remote level monitoring of deployed tanks, totes and containers. T & R Oil Company installed more than 90 TSU1000 monitors on its short 5' DEF totes.

The non-contact TSU1000 ultrasonic level sensor is fully integrated into the battery-powered monitor, which can be installed in locations where network power and connectivity infrastructure are not available. The monitor has a durable weather-proof enclosure and long battery life, making this solution ideal for use in a broad range of tank and tote applications.

With the AquaPhoenix Intelligence Platform (AIP), T & R Oil Company can remotely monitor one or 100,000 totes because AIP provides tank level information anywhere an internet connection is available - via computer, tablet or smartphone. The userfriendly dashboard displays accurate measurements across all tanks, enabling users to utilize the intelligence to optimize business decisions around operations and logistics by knowing when a tank needs service.

Results

The TankScan TSU1000's 4G LTE technology ensures the long-term viability of T & R Oil Company's monitoring hardware investment. It also allows them to plan fluid deliveries and pickups based on the latest information to achieve optimal route efficiencies and maximum customer service.

"The TankScan solution gives me visibility over my customers," added Tullo. "I'm able to send routes out further because I know how much DEF I can sell to customers between point A and point B. And I know how much money I'm going to make and how much product I'm going to sell before the route even goes."

The TankScan TSU1000 ultrasonic monitoring system optimizes the distribution and collection processes while decreasing the need for manual inspections at remote tank sites. It also allows T & R Oil Company to know when tanks need to be serviced before they do. Additionally, the accurate tank data ensures T & R Oil Company's trucks are deployed efficiently, eliminating costly run outs or overflows and providing just-in-time collections and deliveries.

"With TankScan, I know my readings are accurate and I'm able to maximize my profits on the routes," added Tullo. "This is the only tank monitoring system that we're using going forward."

203-0019-000 Rev. B 5/25/2025

AquaPhoenix Scientific
860 Gitts Run Road
Hanover, PA 17331

PH: 877-847-7226

Request a Demo Now
www.tankscan.com/contact



©2025 AquaPhoenix. All Rights Reserved. TankScan images and marketing materials are protected by various patents, copyrights and/or trademarks. AquaPhoenix assumes no responsibility for any errors which may appear in this document, reserves the right to change devices or specifications detailed herein at any time without notice, and does not make any commitment to update the information contained herein. No licenses to patents or other intellectual property of AquaPhoenix are granted by the Company in connection with the sale of TankScan products, expressly or by implication.