

Maintaining Water Levels at the Vineyard with Remote Level Monitoring



V5 Vineyards started when 5 families passionately joined forces to meticulously craft specialty wine. Located in Fair Play, El Dorado, CA, the vineyard sits at an elevation of 2300 feet and holds the natural landscape and perfect weather for growing the most popular variety of grapes.



Applications:
Water Leak Detection

Market:
Viticulture

Challenge

V5 Vineyards emphasizes the importance of viticulture best practices and environmental care for producing a high-quality product. Maintaining a proper water supply is critical to growing healthy vines. V5 Vineyards monitored tank levels by making routine trips to the site to visually check the water levels in their tanks. The major concerns are reducing unnecessary travel, improving reliability of the operation, and most importantly, knowing what is happening at the site when no-one is present.

Physically traveling to the vineyard adds several hours of work and the risk of tanks leaking could spoil a large portion of the grapes. Extreme weather conditions can leave risks of travel during each trip. If the operator is rushed, the system checks may be missed or overlooked.

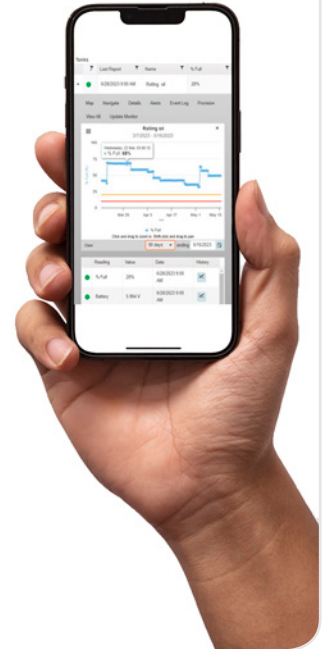
“Nobody lives at the vineyard which makes the risk of a tank leaking unbearable. The grapes need a consistent supply of water to flourish”, said Sasitharan, Operations Manager.



Solution

In 2023, V5 Vineyards installed the TankScan TSU1000 Tank Monitoring System on a water tank at their vineyard in El Dorado, CA. The remote monitoring system leverages existing wireless cellular infrastructure and a cloud software application to eliminate large startup and setup costs associated with typical SCADA systems. The install requires screwing the monitor into a 2" port on the top of tank and plugging in the battery. The cloud application is setup remotely and offers unlimited users, historical trending, and email/text notifications.

The tank levels are viewed from field operator's cell phone or from a PC at a remote office. The system is cost effective due to its use of existing infrastructures through internet connectivity, internet browser, email, text message and cloud compute. The user is provided with accurate readings to devices he already owns, understands and supports.



Results

V5 Vineyards has seen numerous benefits from remote level monitoring including:

- Reduced labor and overhead associated with trips to the field locations
- Improved reliability of their field operations with remote tank level visibility
- Improved confidence and reduced environmental risk with automated notifications
- Improved safety by reducing travel in hazardous weather conditions

**“It was a simple installation, and it is saving our family business time and stress”,
said Sasitharan, Operations Manager.**