

Rodnick Farm uses Davis Instruments EnviroMonitor to meet water supply challenges



An ideal climate for distinct wine grapes

OVERVIEW

Located a couple hours south of San Francisco, California, in the Chalone AVA in Monterey County, Rodnick Farm produces organic wine grapes that artisan wine partners turn into a variety of top-tier wines. Originally planted by California wine pioneer Richard Graff, this special property slopes to the west in the Gavilan Mountains and boasts six microclimates within its rolling topography with elevation changes from 1500 to 1900 feet. The unique soils contain a large mixture of limestone and granite, creating an ideal combination of elevation, soils, and climate for growing distinct wine grapes.

Challenge: Irrigating with restricted water supply

Although Rodnick Farm has access to a dedicated reservoir built specifically for its region, there is a very limited quantity of water available each week for irrigation. As a result, owner Kurt Gollnick must be frugal with water applications across the 30 planted acres. In addition, the previous irrigation technology provided inadequate access to critical data in real-time and from anywhere. Without reliable technology to accurately monitor soil moisture, weather forecasts, and other key environmental conditions, the grape production was at risk of failure.

1. LIMITED WATER SUPPLY

Well water pumped from Salinas Valley Aquifer to a local reservoir is rationed across the community, resulting in limited irrigation for the farm.

2. UNRELIABLE TECHNOLOGY

Outdated neutron probe technology based on a radioactive source not only increased health risks, but also failed to measure soil moisture accurately and on time.

3. UNABLE TO MONITOR REMOTELY

Inability to download data directly to a computer or mobile device from anywhere to view real-time data and adjust irrigation schedules based on the latest conditions.



I chose my system because I needed a well-built and reliable agricultural product. I needed it to be high tech, but accessible, easy to understand and use, and I needed it to collect a ton of data. We chose a Davis system because it was all that, from a company that will stand behind its products. The Davis support team has been great! Efficient, hard-working, communicative, and very responsive.

— Kurt Gollnick
Owner at Rodnick Farm



Solution: Flexible and Innovative EnviroMonitor Technology

When Gollnick decided to upgrade his irrigation technology at Rodnick Farm, he waited for the best technology to emerge, and identified Davis Instruments as his ideal partner. His custom EnviroMonitor system collects Davis and third-party sensor data in Nodes, reporting real-time conditions, such as temperature, humidity, leaf wetness, soil moisture, and more, to his EnviroMonitor Gateway and the WeatherLink Cloud. This innovative technology solution coupled with exceptional Davis Instruments customer service now delivers the reliable and precise irrigation monitoring system required for a successful growing season each year.



WHY DAVIS INSTRUMENTS

Davis Instruments has been designing and manufacturing environmental monitoring systems for over 30 years. Our reliable and flexible solutions, from easy-to-install sensors to intuitive apps to view data from anywhere to responsive customer support, help Rodnick Farm efficiently make irrigation and growing decisions based on critical environmental information.



ENVIROMONITOR GATEWAY

Rodnick Farm's EnviroMonitor Gateway transmits real-time sensor data from a Vantage Pro2 GroWeather suite and six Nodes placed throughout the vineyard to the WeatherLink Cloud.



GROWEATHER SENSOR SUITE

With a Vantage Pro2 GroWeather suite, Gollnick can view and monitor real-time, localized weather conditions right on the vineyard so he can respond to changing conditions and make timely decisions.



ENVIROMONITOR NODES WITH DAVIS AND THIRD-PARTY SENSORS

Rodnick Farm's customized agricultural weather system features six solar-powered EnviroMonitor Nodes with Davis and 3rd party sensors. Each Node gathers critical data on soil temperature, humidity, and soil moisture, from the various microclimates within the vineyard to optimize irrigation decisions for the limited water supply.



WEATHERLINK CLOUD

Through the Gateway, Node and weather station data is uploaded to an account on WeatherLink.com and in the WeatherLink App. With a phone, tablet, or computer, Gollnick can view a dashboard of real-time data from his EnviroMonitor system, set and receive email alerts, and monitor conditions from anywhere.

KEY BENEFITS

System flexibility

With a broad range of supported sensors from both Davis and third-party vendors, Davis's EnviroMonitor system provides the flexibility and adaptability to meet Rodnick Farm's unique requirements.

Reliable performance

Davis Instruments technology is accessible, easy to understand and use, and collects all the data needed to make daily decisions at Rodnick Farm.

Responsive Customer Service

For Rodnick Farm, support is critical. The Davis customer service team provided Gollnick personalized support from day one, from sensor selection to installation to data visualization, delivering responsive support in any situation.