



Background

The winery

- A large California winery producing 1.5 million cases annually
- Maintains 100,000 barrels in the winery
- Top 30 wine producer in the US
- Family owned and operated, established in 1971
- Varietals include cabernet, pinot noir, syrah, petite sirah, and other red and white varieties
- Offers four tiers of signature wines, ranging from limited-production to everyday wines

Experience with Brett

- Uncertainty about where Brett comes from
- Risk of transmission from one tank to the next
- Brett seems to simmer along and may pop up maybe a year after barreling down
- Timing for test results is critical, especially closer to bottling

Previous protocol for detection

- Sensory perception
- Plating of suspicious samples via in-house lab
- Confirmatory 4EP/4EG testing via external lab service

Experience with vinoBRETT

- Started using vinoBRETT in July 2014
- Over 2000 tests run to date



Rationale for implementing vinoBRETT

- Quick and easy to test in-house
- PCR testing that is accurate, sensitive, and selective
- Results in <4 hours with <30 minutes of prep
- Less expensive than external PCR testing

Rationale for adopting a proactive Brett management protocol

Detect Early

Before Brett can produce damaging 4EP/4EG



Intervene Quickly

Reduce the risk of spreading contamination, manage the situation before it gets out of hand

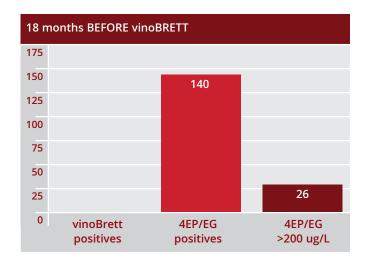


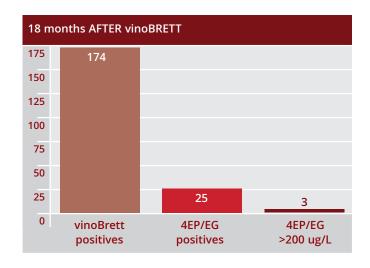
Limit Consequences

Reduce the risk of sensory "damage" to wine that can have costly implications

Proactive Brett Monitoring

- Approximately 2000 tests run in each time period
- The incidence of positive tests was roughly equal in the two time periods
- However, using vinoBRETT enabled Brett detection BEFORE the presence of 4EP/4EG in majority of cases





The Results

80% REDUCTION in 4EP/4EG incidents 90% REDUCTION in high level 4EP/4EG incidents

Summary

vinoBRETT enabled early detection, with significant reduction in contamination that can impact wine quality.

Discussion

In the 18-month period since implementing a proactive Brett management protocol, this winery experienced a significant reduction in wine lots infected with Brettanomyces byproducts (4EP/4EG). Approximately 2000 vinoBRETT tests have been run at the winery in this period. The proactive approach to testing resulted in earlier detection of Brett, with the ability to intervene while the threat is low, prevent cross-contamination, avoid costly remediation and potential loss of wine quality and value. Total costs for testing during this period were also reduced by >40% as a result of conducting vinoBRETT testing in-house compared to sending out samples for 4EP/4EG testing.

To request a demonstration or learn more about vinoBRETT, contact Invisible Sentinel at 215-966-6118, or info@invisiblesentinel.com

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