

FERMENTATION ASSESSMENT PANEL

PANEL 9

When fermentations are stuck or sluggish, the **Fermentation Assessment Panel** can provide key information to determine the possible cause and degree of fermentation completion. This panel gives winemakers extensive information that allows them to take steps necessary to finish fermentation. Without this information, treating a stuck or sluggish wine could be costly, time consuming and in some cases ineffective.

Fermentation Assessment Panel Includes:

- Alcohol (GC)
- Volatile Acidity (segmented flow or cash still)
- Glucose/Fructose (enzymatic)

- Microscopic Scan
- Malic Acid (enzymatic)

Components of the Panel

The test for **Alcohol** will determine how much of the initial sugar has fermented. It is also a good test to evaluate the feasibility of completion. The sample is tested by Gas Chromatograph (GC) because of the possible high sugar level and presence of CO₂.

A **Microscopic Scan** checks for the presence of visible bacteria that might inhibit the fermentation process. It is also used to estimate yeast viability in the stuck or sluggish wine.



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Volatile Acidity establishes a baseline for the monitoring of potential spoilage problems. If volatile acidity increases over

potential spoilage problems. If volatile acidity increases over time, spoilage organisms are possibly present which would contribute to fermentation problems. The test for volatile acidity is run on a cash still or the comparable segmented flow analyzer.

The **Malic Acid** test is needed to determine the status of the malolactic fermentation. Depending upon whether there is (L-) malic acid present shapes the course of action a winemaker would take for a stuck fermentation. If malic acid is depleted, SO_2 additions and/or the application of Lysozyme should be considered. The malic acid test and the following tests for sugars are determined by enzymatic methods.

Glucose/Fructose is tested to understand where in the process the fermentation has stopped.

Sampling

- The panel requires at least 200mL of sample. Please send samples in plastic containers only. Complementary plastic sample bottles are available from all four Enartis Vinquiry offices. Call the number below to have sample bottles shipped to you.
- Samples must remain cool so there is no fermentation in the closed bottle. If you are unable to bring in or courier the sample to a Enartis Vinquiry office, please surround the sample with ice packs and ship via overnight postage.
- Do not add excessive amounts of potassium metabisulfite to the sample prior to analysis as it may interfere with results.

For further information on the Fermentation Assessment Panel please call 707-838-6312.