

**Agricultural and Environmental Services Laboratory**

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***Outline of Proposed Services for the Wine and Grape Industry***

***Vineyard Management***

**Soil Testing**

Before vineyards are installed soil samples should be taken to determine what nutrient additions need to be made, drainage issues, etc. Soils should also be tested annually or semiannually to ensure that nutrient deficiencies are not developing.

**Routine Soil Test**

**Water Testing**

Irrigation water should be tested for trace metals and bacteria prior to establishing a vineyard. Any water used to wash grapes should also be tested. **Water Quality Test (W2, or W1+W11), and Total Coliform/ E-coli test (W35)**

**Petiole Testing**

Vine petioles should be tested at full bloom and again during late summer (70-100 days after bloom) to ensure adequate nutrient uptake. Any symptoms of disease or nutrition problems throughout the growing season should be met with petiole testing for nutrient concentrations.

**Basic Plant Tissue Test, Petiole test kit (2 petiole test dates)**

(Total Nitrogen, Phosphorus, Potassium, Calcium, Magnesium, Boron, Iron, Manganese, Copper, Zinc, Molybdenum, and Aluminum)

**Pesticide/ Herbicide Testing**

Could be run on irrigation water, grape juice, or wine to determine if contamination has occurred.

**Pesticide Screen, Herbicide Screen (Note: we will need to develop a specific pesticide target list).**

***Grape/ Wine Testing***

**Vineyard Panel**

Used to monitor maturation of grapes and make decisions about harvesting

**Brix, Tiratable Acidity (TA), pH**

**Pre-fermentation Panel**

Allows winemakers to make informed decisions about how to treat grapes for desired products.

**Brix, Titratable Acidity (TA), pH, Ammonium, Total N, Organic Acid Profile (Malic, Acetic, Tartaric, Lactic, Succinic, Citric, and Formic)**

**Aging Panel**

Should be conducted throughout the aging process to ensure wine stability

**SO2 (Free and Total), Volatile Acidity (VA), Titratable Acidity (TA)**

**Wine Panel**

Should be conducted on all wines post-fermentation.

**Sugar profile (Glucose, Sucrose, and Fructose), SO2 (Free and Total), Volatile Acidity (VA), Titratable Acidity (TA), pH, Organic Acid Profile (Malic, Acetic, Tartaric, Lactic, Succinic, and Citric), and Alcohol**

**Optional: Turbidity, Fining trials, and Mineral Analysis.**