



BAKER WINE & GRAPE ANALYSIS

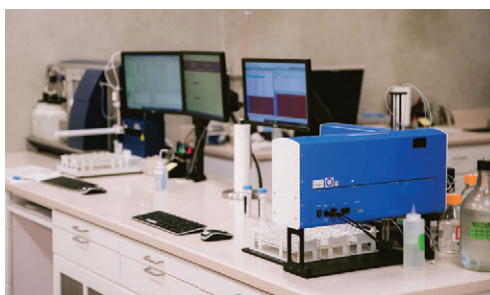


BWGA HOURS • MON-FRI • 9am-5pm • www.bwga.net • 805.226.8386

Lab Update — Heather Mikelonis

As we roll into the summer season of lab analysis, we look forward to a brief respite before we get knee-deep into harvest. One of the common items on our summer to-do list is review new equipment and determine if it meets our strict criteria to become a new member of the team.

We often try a demo unit for 30 days, which allows us to run unlimited comparative tests with a variety of samples. Other times we send samples to the manufacturer and ask them to run the samples while we keep a set of samples here and run them on our equipment on the same day. After results are received, we review the details and determine if the results between the primary method and the new instrument are tight enough. After more than 20 years of serving the wine industry with accurate and efficient results, we have developed a very strict set of guidelines when reviewing new equipment. Last year we tested three different units and none of them passed our requirements. This year we have



already reviewed and accepted one new instrument and in June we will review one more.

Another way we obtain information about various pieces of equipment available or new trends in analysis is by talking with

people working in other labs. In 2015 I got a small group of lab chemists together to have a chance to talk and be resources for each other. The Central Coast has such a collaborative spirit, I knew getting a group of lab folks together would be beneficial. Over the years the group has grown to more than 20 people, and we have even had people attend the lunches from far beyond the area! Are you working in the lab at your winery? If you would like to get added to our lab lunch list, please email me (heather@bwga.net) and I'll let you know when the next luncheon is scheduled. We try to have three lunches each year and keep it to 60 or 90 minutes.

What is Dry Extract?

Some importers and distributors require measuring the dry extract of wine. What does that mean? Simply put, dry extract is a measurement of the solids that remain in a wine after the water and alcohol are taken away. Dry extract accounts for some of the flavor and body of a wine.

What makes up the dry extract solids?

Acids, sugars, aromatic substances, anthocyanins, flavonoids, tannins, proteins, nitrogen compounds, vitamins, minerals and trace elements.

What are typical levels of dry extract?

White wines commonly have dry extract levels between 15-25 g/L, red wines often range from 20-35 g/L.

Why would my distributor require a dry extract measurement?

The greater the dry extract, the more *oomph* the wine might have. A wine at the 15 g/L dry extract level might be perceived as thin or light-bodied, while a wine with 25 g/L or greater dry extract could be perceived as richer or full-bodied.



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Volatile Acids and Acetic Acid

Volatile Acidity (VA) and Acetic Acid (AA) are often used interchangeably. Volatile acids are fatty acids that can be steam distilled in a Cash Still. In wine, acetic acid makes up >93% of volatile acids; because of this majority, VA is expressed in terms of AA.

Carbonic (from CO₂), sulfurous (from SO₂), lactic, formic, butyric, propionic, and sorbic acids are the lesser VA components. All wines contain these volatile acids, but they are usually only detected aromatically in wines with microbial issues that lead to elevated levels. Normal levels can be desirable and add complexity.

Yeast produce VA during primary fermentation (0.01-0.04 g/100mL). High levels of VA during primary fermentation can be caused by mold/rot on grapes,

native/wild yeasts, low/high temperatures, high brix, low/excessive available nitrogen, or low pH. High levels of VA in wine are caused by acetic acid bacteria which convert alcohol to AA when exposed to oxygen. Lactic acid bacteria can also increase VA when glucose is available.

If you see your VA climbing and your wine is developing negative sensory attributes, check for oxygen exposure, microbial growth and monitor the Free SO₂ level. After stabilizing a high VA wine, a common course of action is blending the high VA

VA limits in the US (g/100 mL)

White and Rose	0.12
Red	0.14
White >28 Brix	0.15
Red >28 Brix	0.17

wine with a low VA wine. There is treatment to lower VA by removing AA. This is often done through a VA removal filtration vendor. If you decide to remove VA, we recommend enzymatic testing for acetic acid.

**Volatile Acid \$13; Acetic Acid \$25;
Cash Still VA \$50**



Q: What are your hours?

A: M-F 9am-5pm, with additional hours during harvest.

Q: Do you test for smoke impact?

A: No, we do not, but Tastry, Twin Arbor and ETS are local labs that do.

Q: What Brett analysis do you do?

A: We offer a sensitive *Brettanomyces* DNA test, which is a quantitative method that indicates viable as well as non-culturable cells. The cost is \$60/sample and turnaround time is one day. We also offer differential Brett plating, which only shows viable, culturable cells. This less sensitive method costs \$25/sample and takes 10 days.

Q: Can we upload our results directly into InnoVint?

A: Yes! Log in to your **bwga.net Client Portal** and go to the **Settings** tab. Under **Notifications** choose **CSV** as the attachment and then **Save** your changes. In **InnoVint** go to **Analyses** and then import your .csv report to match the analysis with the appropriate lot.

Q: Do you have a mobile app?

A: No, we do not have a BWGA app at this time.

Q: Do you do water, soil or nutritional analysis?

A: We do not. Some labs that do offer these analyses include Dellavalle Laboratory, Fruit Growers Laboratory and Abalone Coast Analytical.

Q: Can you text my results?

A: Yes, we can. Log in to your **bwga.net Client Portal** and go to the **Settings** tab. Under **Notifications** check the box for **Send a SMS text message**. Another option is to contact us and we will set it up for you: **805.226.8386** or **results@bwga.net**

BWGA Contest Winner — Guess the Caps

Our winner was **Lauren Smith** from Halter Ranch!

The total number of caps contained in our giant graduated cylinder was 269, Lauren had the closest guess at 267.

When asked the secret to her success, Lauren

said she “used mental math to figure out the approximate number in one area, then extrapolated the final number.” Congratulations to Lauren, that mental math really paid off with a gift card to Órale and excellent bragging rights!



Bench Trials

A bench trial is a small-scale trial meant to simulate the addition of an additive or fining agent to a larger volume of wine. This is an important step in determining what effect the addition will have on the wine and to pinpoint the dosage needed.

If you don't have the ability to set up your own trials, let BWGA do the work for you! Simply bring in the wine to be treated with the agents that you want to use, and we will set up trials for you to evaluate.

We are offering a new bench trial — Color Fining Trial. Color fining is popular for dialing in color on Rosé, Pinot Grigio, or oxidized white wines by using a carbon-based product.

FUN FACT:

Molecular-level analysis of wine has determined around 7,000 substances. This type of analysis can also determine the origin of a wine and if any manipulations have occurred in its lifetime.

Bench Trial Services Offered at BWGA

Trial	Description	Volume needed	Cost per sample
Celstab Trial	Heat (protein) stability, cold (tartrate) stability, cold stability with Celstab addition, and color stability for Rosé	750 mL	\$95 White \$122 Rosé
Bentonite Trial	Determine amount of bentonite required for heat (protein) stability in white and Rosé wine	750 mL	\$80
Sulfide (Copper) Trial	Evaluating sulfide issues and the addition of ascorbic acid or copper sulfate (Sensory Evaluation)	750 mL	\$55
Acid Adjustment Trial	Balancing the acidity by hitting a pH or TA target	750 mL	\$70
Wine Stylizing	Wine enhancing and getting the full potential from your wine (Sensory Evaluation)	2x 750 mL	\$100
Troubleshooting	Identifying wine flaws or undesirable characteristics and how to fix them (Sensory Evaluation)	750 mL	\$85
Alcohol Bench Trial	Hitting a target alcohol with dilution or fortification	500 mL	\$175
Fining Trial	Gelatin, isinglass, egg white, casein, pea protein, PVPP or specific manufactured products	750 mL	\$70
Color Fining Trial	Color reduction for white wine and Rosé using carbon	750 mL	\$125





Running Early or Late?

Leave your samples in the **BWGA drop box** anytime outside of our normal business hours!
To access the drop box just open the utility closet at the left of the main doors.

Client Portal

