HARVEST RECAP

Well, the season's finally over. Everything came in a month early and then growing ended, leaving the Chardonnay to hang an additional month to ripen. With one exception, all varieties were exceptional with the potential to make rich, elegant wines with lots of varietal character.

- **CHARDONNAY: Appellation – Monterey County; Sugar 26.0°B adjusted to 24.8°B (14.6% potential alcohol); pH 3.74 adjusted to 3.49; Total Acidity 6.3 g/L adjusted to 7.9; CH16 M-L; Vintage White yeast.**

- **MERLOT: Appellation – Paso Robles/Templeton Gap/Pomar Ranch; "Cold Soak" for three days; Sugar 24.5°B (14.5% potential alcohol); pH 3.6; OSU1/OSU2 M-L; RP15 yeast. No adjustments at crush.**

- **SYRAH: Appellation - Paso Robles/Templeton Gap/Brohaugh Ranch; Sugar 26.5°B adjusted to 24.5°B (14.5% potential alcohol) after one day "cold soak"; Acidity left at pH 3.6; OSU1/OSU2 M-L; D254 yeast.**

- **CABERNET SAUVIGNON: Appellation - Paso Robles/Templeton Gap/Pomar Ranch; After a three day "cold soak", Sugars rose from 24.8°B to 25.2°B (14.9% potential alcohol) and not adjusted lower; the acidity soaked up to pH 3.57, just perfect; OSU1/OSU2 M-L; RP15 yeast.**

- **ZINFANDEL: Appellation – Paso Robles/Chimney Rock Road, Westside/Janes Ranch; Sugar 22.5°B (13.3% potential alcohol); pH 3.8 adjusted to 3.6; 5.0g/L Total Acidity adjusted to 8.0g/L; OSU1/OSU2 M-L; RP15 yeast. (Let's keep an eye on this one. It seemed a bit lack luster at pressing. If not improving, I'll be refunding your price less the cost of gapes and transportation).**

- **SANGIOVESE: Appellation – Los Alamos/White Hawk Ranch; After a four day "cold soak", Sugars soaked up to 26.2°B. Adjusted to 24.5°B (14.5% potential alcohol); pH soaked up from 3.46 to 3.6. Perfect; CH16 M-L; BM 4x4 yeast.**

- **SYRAH: Appellation – Los Alamos/PCV Vineyard; After a four day "cold soak", sugars soaked up from 25.2°B to 27.1°B. Adjusted to 25.0°B (14.75% potential alcohol); pH 3.76. Adjusted to pH 3.6.; CH16 M-L; D254 yeast**

WHAT TO DO NOW!

Here we are, mid-November. Your wines should be "dry", all of the sugar gone. Your MLFs should be complete. If so, your Acidity and SO_2 should be adjusted. Then your cellar needs to be as cold as possible to promote Cold Stability. Let's take each task separately.

- **Your wines should be "dry". No perceived sweetness. "Fruity" yes. "Sweet" no.** That's about -2°B on your Hydrometer. Below 500 mg/L (.5%), if using the *Accuvin Residual Sugar Testers. If* grapes were accurately diluted to below 25°B and didn't soak up higher; *if* the right quantity of new, viable yeast was used; *if* the right kind of nutrient, added at the correct times was used; *if* the cellar isn't below say, 55 degrees, all reducible sugars should be used up and your wine "dry".

- **Your Malo – Lactic – Fermentations (MLFs), should be complete.**
  MLF is the simple conversion of the Malic Acid into Lactic Acid by M-L Bacteria. This makes the wine MLF stabile, preventing a "secondary fermentation" from happening later on, resulting in a spritzy, off-flavored, ruined wine. (*If* you used the right M-L bacteria for your pH; *If* you added the right nutrients at the right time; *if* you did not add too much SO_2 (CH16's SO_2 limits are: Reds – 70 Total/ 30 Free. Whites – 40 Total/15 Free) ; *if* you've keep the cellar above 65 degrees, MLFs should be complete. The only reliable way to tell is to use the *Accuvin Malic Acid Testers* (read & follow direction)) If at 30 mg/L, you're complete. If above this, wait it out (at the ideal 63 -71 degrees). *When* complete, raise and *maintain* your SO_2 at the chart's recommended level, relative to your pH.

- **It's time to Adjust Your SO_2 Levels, *if and when* your MLFs are totally complete.** (Reminder - *SO_2 does not prevent oxidation.* It only combines with oxidized by-products, like aldehydes, converting them into less noticeable compounds) Consult the SO_2 Chart, that you all should have. Raise the SO_2 level to the recommended level, relative to your wine's pH. *Maintain this level* through the final bottling. Reminder, if you do not have a Vinmetrica Tester or a Hanna SO_2 Tester; or send your wine to a lab for testing; or at least, use the Accuvin SO_2 Test Kit, here's some decent homespun wisdom: (*At the end of fermentation*, your Free SO_2 level is about 0. Using the SO_2 chart, bring your Free SO_2 level to the recommended level/ relative to the pH. *After three months*, assume a Free

SO_2 loss of 50%. Add 50% of what you added post MLF. Repeat every three months. This coincides with the average racking schedule of every three months. eg: at a pH of 3.5, ¼ of a tsp. of Sulfite Powder per 5 gallons of wine, will give you about 50 ppm Total SO_2 and 25 ppm Free SO_2. In three months, you've lost 50% of the Free SO_2, down to about 12ppm Free SO_2. Therefore, you'd add 1/8 of a tsp. per 5 gallon of wine to bring your Free SO_2 level back to the chart's recommended *minimum* levels. Repeat every three months)

- **It's time to adjust your wine's Acidity.**

  This is done "To Taste", not to some arbitrary pH or Total Acidity (T.A.) level. However, you still should know what your pH/T.A. are, before and after adjustment. **(unless sending a sample to a Lab, you will need a pH meter that reads to hundredths. pH papers just are not nearly accurate enough and you are just guessing at the color change) Take a small sample ("mess up a small amount before messing up a large amount of wine") of your wine and slowly add Tartaric Acid. (Being sure that the acid is dissolved, stop adding when your sample tastes *"balanced"* to *your* preference. Too low an acidity, tastes "flat/dull/lifeless". Too much acidity, tastes "tart". Now, measure this acidity, and adjust the remainder of your wine. Always, add the Tartaric Acid in stages, to avoid adding too much. The last additions will give a much greater change than the earlier additions. Reminder, that a little excess acid will drop out as your wine is chilling over the 2 – 3 winter months)**

- **Finally, it's time to chill your wines.**

  The colder the wine gets, the faster it achieves "Cold Stability". Three weeks in a refrigerator. Three months at cool "winter" temperatures.

  (Chilling forces the "excess" Tartaric Acid to precipitate out as crème of tartar / tartrate crystals / KHTa, lowering the perceived acidity. The amount of this acidity drop, depends on the temperature and the amount of Potassium (K^+) ions available to bind with the Tartaric Acid (H_2Ta) ions) (The "cold cellar" technique, is usually adequate for red wines that will not be chilled before serving. For whites, "cold stability" can only be completely achieved via forced refrigeration)

- **What's next? – Maintaining SO_2 levels; Egg White/Skim Milk fining of reds to reduce excess astringent tannins (seldom needed in Socal grapes); Bentonite with Sparkolloid fining for whites (mandatory for "Heat Stability"); Never re-adjust acidity, unless you can force chill out the "excess" Tartaric Acid. Bottle late Spring or Summer to preserve "fruitiness". Or, extend aging to the next Spring or Summer to increase "complexity" at the expense of fruit forwardness.**

"POST CRUSH CLINIC"

(Shop Grape Winemakers Only!)

Saturday, December 6th, 10:00 – 2:00

(Bring a 5 oz sample/variety)