Making wine with Vignoles
By Doug Bakker
Winemaker, Madison County Winery
St. Charles, IA

I. Harvest Dates
   A. 2011 – Sept. 3rd (normal)
   B. 2012 – Aug. 20th (2 weeks early)

II. Juice Analysis at Harvest
   A. 2011 – 20°B, pH 3.11
   B. 2012 – 21.3°B, pH 3.08
      a. Higher brix but also higher acid (2 weeks early)
      b. Excellent overall quality of fruit but very low yield

III. Crush
   A. Basic crush/press procedures
      a. Spray grapes w/ Pectic Enzyme prior to crush/destem
      b. Add rice hulls at crusher
      c. Press and analysis juice
   B. Adjustments to juice
      a. Add Calcium Carbonate to reduce acidity
   C. Cold Settle
      a. Drop juice temperature to 56°F
      b. Fine w/ Bentonite
      c. Add 30 ppm Potassium Metabisulfite
      d. Top ullage w/ Argon
   D. Rack off 2 days later

IV. Fermentation
   A. Inoculated w/ Red Star Premier Cuvée
   B. Jumpstarted w/ yeast nutrient, Superferment
   C. Cold fermentation, 54°F
   D. Added DAP during fermentation
   E. Fermentation completed in 21 days
   F. Racked off lees/added 50 ppm Potassium Metabisulfite

V. Fining
   A. Fined w/ Sparkolloid
   B. Follow up with Bentonite 3 days later
   C. Racked/Added 35 ppm Potassium Metabisulfite
   D. Allow to settle for about 2 ½ months
      a. During this time Grape Skin Tannins can be added to improve mouthfeel and balance acidity
VI. **Finishing**  
   A. Racked to chiller tank to begin Cold Stabilization  
      a. Sparged w/ CO2 during racking  
      b. Drop temp to 24°F  
      c. Seeded w/ Potassium Bitartrate

VII. **Filtration**  
   A. Filter off sediment of Cold Stabilization  
      a. Allowed to warm to room temperature  
      b. Again sparge w/ CO2 to remove DO  
   B. Multiple filtrations, down to .45 micron  
   C. Final Sparge to remove DO before bottling  
   D. Added 35 ppm Potassium Metabisulfite  
   E. Bottled  
      a. Final DO test showed .51

VIII. **Final Analysis**  
   A. Test results from Midwest Grape & Wine Institute  
      a. pH 3.46  
      b. 11.8% Alc.  
      c. 0% RS  
      d. 8.27 TA  
      e. $SO_2^2$ 53.6 ppm

IX. **Important Equipment**  
   A. DO meter  
      a. $400 - $800 for good quality meter  
   B. Carbodoseur  
      a. $230 - $275  
   C. Carbonation/Aeration Stone setup  
      a. $225 - $300  
   D. Tee Valve (TriClamp)  
      a. $30 - $40  
   E. CO2, Nitrogen, and/or Argon gases