

Spring Grape & Wine Workshop

Chateau Thomas Winery

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The Proactive Winery

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The Proactive Approach

- *Food Safety*
- *Record keeping*
- *Preparedness*
- *Awareness*
- *Quality*
- *Documentation*
- *Knowing your facility*
- *Trace-ability from grape to glass*



The Bioterrorism Act

Protecting the Food Supply

- *Requires domestic and foreign food facilities that manufacture, process, pack, or hold food for consumption in the United States to register with the U.S. Food and Drug Administration (FDA).*
- *Will help the FDA identify and locate promptly food processors and other establishments, in the event of deliberate or accidental contamination of the food supply.*



www.fda.gov

The Bioterrorism Act

Q: Are wineries subject to this regulation?

A: *Yes. The winery is considered a manufacturer and must establish and maintain records of the food (including ingredients) that it receives as well as the food (wine) that it releases. If the winery also grows and harvests grapes that it uses to manufacture the wine, then it would be engaged in a mixed activity. In this instance, the growing facility may qualify for the farm exemption; the manufacturing activity would remain subject to the nontransporter requirements in the final rule.*



Are you required or exempt to:

1. Register – Section 305

- Does your winery need to register with the FDA?
- Some farms, retail food establishments, restaurants are exempt

2. Establish and Maintain Records – Section 306

- Does your winery need to keep records?
- Some farms, retail food establishments, restaurants are exempt

www.fda.gov

1-888-INFO-FDA

To register your winery:

1. Go to www.fda.gov (form 3537)
2. One time registration, unless updates are needed
3. Takes 15 minutes to complete
4. Supply winery name, owner's name, address, emergency contact phone number and make a few other selections

www.fda.gov

1-888-INFO-FDA

Record keeping requirements:

1. Supplier of grapes
2. Supplier of ingredients added during wine production (water, yeast, sugar, sulfites)
3. Supplier of any part of the packaging that touches the final product (glass, cork)
4. Receiver of finished goods

Record keeping supplier details:

Wineries must maintain records that identify the immediate previous source and subsequent recipient of the wine they distribute, and make them available upon request within a few hours, or else face civil or criminal penalties.

1. **Contact information** (mail, UPS, FEDEX, semi)
2. **Product description** (brand name, variety)
3. **Date received or released**
4. **Lot number**
5. **Packaging information** (750 ml, 12 per case)

Record keeping issues?

1. Blending
2. Barrel Topping
3. Multiple bottling dates for one product
4. Changing cork or glass lots within a bottling run
5. Custom Crush
6. The art of winemaking

Compliance dates:

- **Large wineries** by December 9, 2005
(500 or more full time equivalent employees/FTE's*)
- **Medium wineries** must comply by **June 9, 2006**
(11-499 FTE's)
- **Small wineries** must comply by **December 11, 2006**
(≤10 FTE's)

*Two part-time employees, each working half time, count as one FTE



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Lab Quality System

A Structure For Managing Processes

- *Provides the written structure which allows winemakers to prioritize the many decisions required to consistently produce premium wines. It requires winemakers to ask the basic question, “Why am I using this processing method or step?” – Dr. Bruce Zoecklein*
- *Allows for a complete evaluation of winery operations and can lead to the elimination of unnecessary and problematic steps in the winemaking process*

Benefits of a Quality System:

1. Standardized methods
2. Fewer errors
3. Higher level of perceived quality
4. Employee moral
5. Traceability from grape to glass
6. Tailored to your winery, your lab, your facility

5 Steps to a Quality System:

1. Quality Assurance Manual
2. Method Validation
3. Lab Procedures
4. Training of Employees
5. Proficiency Testing



***Good record keeping and good technique
with accuracy and precision!***

Quality Assurance Manual:

Lays out the quality goals of the laboratory and the resources required to meet them

- Lists equipment, staff, analysis performed
- What do we want to accomplish?
- Desired/acceptable accuracy of lab results
- Performance criteria

Method Validation:

1. Specific to your winery laboratory
2. Lab should be confident in the data it creates
3. Are there limitations to what you can measure?
4. Does your test equipment need calibrated?

Documentation of Lab Procedures:

1. Details of methods, reagents, equipment, glassware
2. Consistent, uniform format
3. Create check-lists, standard-operating-procedures
4. If errors exist, what to look for

Training of Employees:

1. Document lab procedures to maintain the consistency of the process
2. Document the employee's qualifications, training and experience
3. Make sure the employee's training is up-to-date

Proficiency Testing:

1. Tests your lab's performance with other winery labs
2. Helps your lab prove & improve its data
3. Increases your confidence
4. Continual testing—it's essential to a Quality Lab

Costs associated with non-proficiency:

1. Relabeling due to data errors
2. Taxes and fines due to ethanol analysis errors
3. Failure to comply with other federal regulations
4. Product recalls due to instabilities
5. Rejected international shipments
6. Analysis errors causing product liability issues



For Professionals Only

PURDUE
UNIVERSITY



Free SO₂ required at Wine pH (mg/L)

3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9
3.00 13	3.10 16	3.20 20	3.30 25	3.40 32	3.50 40	3.60 50	3.70 63	3.80 79	3.90 100
3.01 13	3.11 16	3.21 20	3.31 26	3.41 32	3.51 41	3.61 51	3.71 64	3.81 81	3.91 102
3.02 13	3.12 17	3.22 21	3.32 26	3.42 33	3.52 42	3.62 52	3.72 66	3.82 83	3.92 105
3.03 13	3.13 17	3.23 21	3.33 27	3.43 34	3.53 43	3.63 54	3.73 68	3.83 85	3.93 107
3.04 14	3.14 17	3.24 22	3.34 28	3.44 35	3.54 44	3.64 55	3.74 69	3.84 87	3.94 110
3.05 14	3.15 18	3.25 22	3.35 28	3.45 35	3.55 45	3.65 56	3.75 71	3.85 89	3.95 112
3.06 14	3.16 18	3.26 23	3.36 29	3.46 36	3.56 46	3.66 57	3.76 72	3.86 91	3.96 115
3.07 15	3.17 19	3.27 23	3.37 29	3.47 37	3.57 47	3.67 59	3.77 74	3.87 93	3.97 117
3.08 15	3.18 19	3.28 24	3.38 30	3.48 38	3.58 48	3.68 60	3.78 76	3.88 95	3.98 120
3.09 15	3.19 19	3.29 25	3.39 31	3.49 39	3.59 49	3.69 62	3.79 78	3.89 98	3.99 123
3.10 16	3.20 20	3.30 25	3.40 32	3.50 40	3.60 50	3.70 63	3.80 79	3.90 100	4.00 126

Molecular SO₂ : 0.85 mg/L

CTS Proficiency Testing

- **Cost: \$555**
- **Each winery receives two bottles during a test period**
- **Three test cycles: March, June and October**
- **Deadline to enroll for 2006: May 8**

www.collaborativetesting.com

571-434-1925

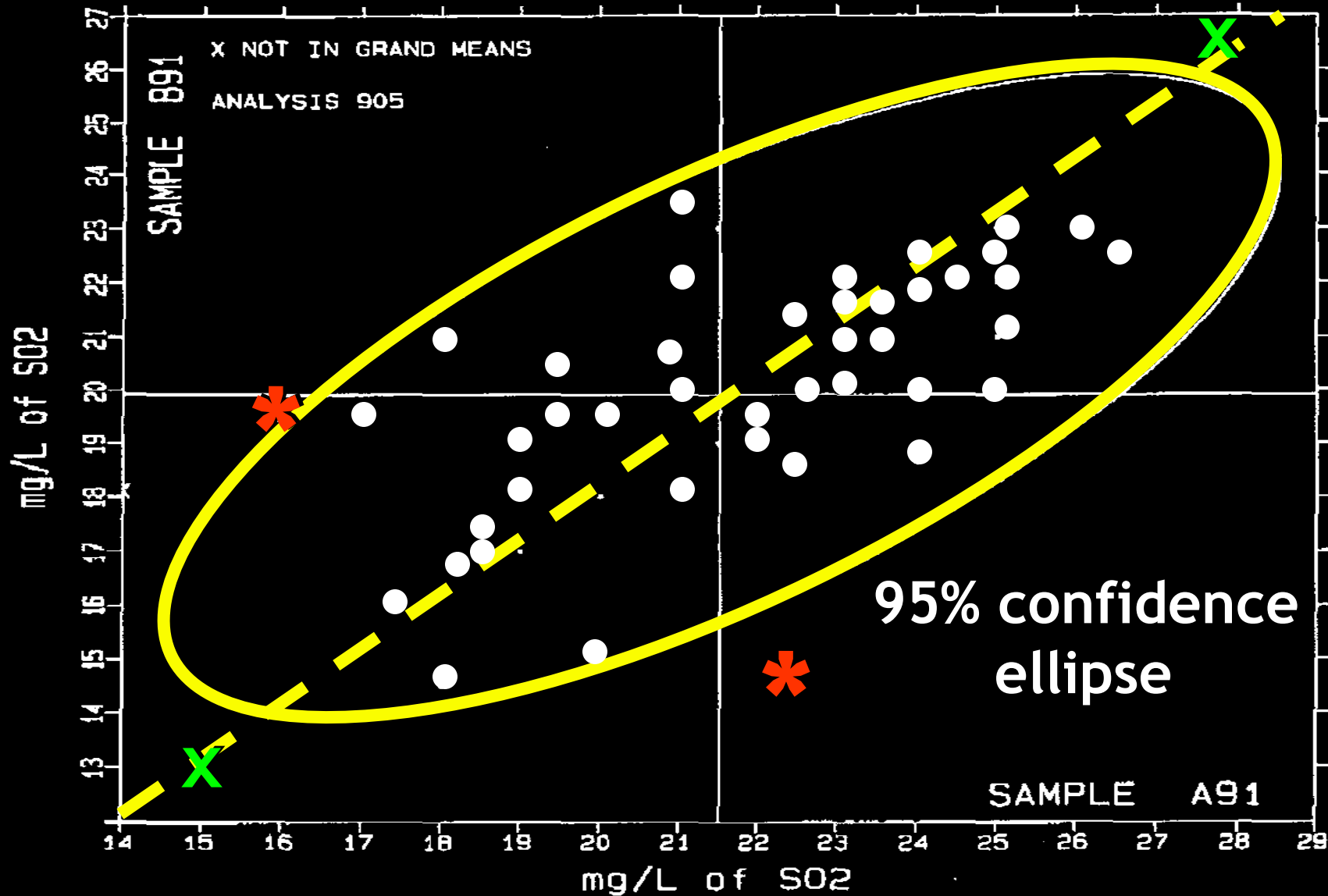


What analyses are tested:

1. Ethanol
2. Total SO₂
3. Free SO₂
4. Titratable Acidity
5. Volatile Acidity
6. Specific Gravity
7. pH
8. Reducing Sugar
9. Malic Acid ...and a few other

Report Format

Free SO₂



Future Issues:

1. Laboratory accreditation
2. Documenting laboratory procedures
3. Performance Criteria
4. Standards for certain analysis



Wine Grape Task Force

Dates to remember in 2006

June 3

Vintage Indiana

Military Park, Indianapolis

www.vintageindiana.com/

June 12

***Summer Grape & Wine Workshop
and Indiana Winegrowers Guild Meeting***

Huber's Orchard & Winery, Starlight

July 27-29

Indy International Wine Competition

Indiana State Fairgrounds

www.in.gov/iwcl/

September 11

Fall Grape & Wine Workshop

Purdue University, West Lafayette

For more Indiana Wine Industry events go to www.indianawines.org.