

# Using Third Party Laboratories to Grow your Quality Program

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### Outline

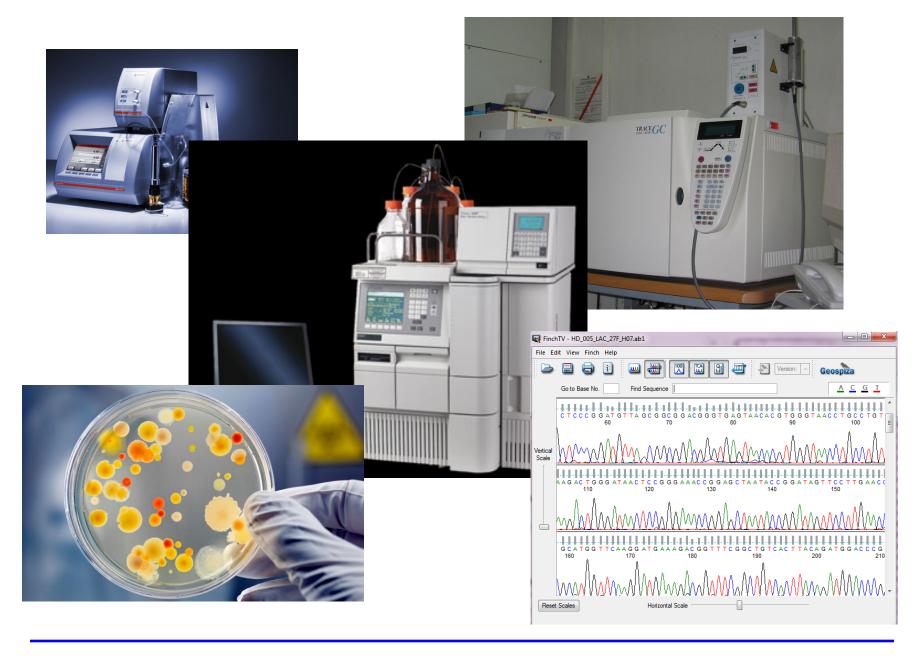
- Why have quality control?
- What is third party validation?
- How can it be used to grow and support your quality program?

## Why a Quality Program?

- Consistent beer from batch to batch
- Predictable fermentation rates
- Consistent flavor profiles
- Detection, identification and control of brewing contaminants
- Allows you to be preventative not reactive

# Third Party Validation

Third party labs fill gaps in your quality assurance program by providing analysis that requires equipment you don't have or validation that your own analysis makes sense.



The Science of Beer

# Why Use TPV?

Independent testing labs are not affiliated with the raw material supplier, the manufacturer, the consumer, or the company whose name appears on the product.

# TPV and Your (Growing) Brewery

 Regular analysis of brewing, fermentation, micro and taste can take a brewer to high levels of proficiency and consistency

 Utilizing third part laboratories allows for analysis to be conducted without huge up front cost

# TPV and Your (Growing) Brewery

- New product evaluation:
  - Raw material changes
  - Flavor matching (Color & BU too) when upgrading brewhouse or scaling from pilot
  - Hop utilization curves for brewhouse or cellar
  - Process changes (yeast, hop additions, etc)



# TPV and Your (Growing) Brewery

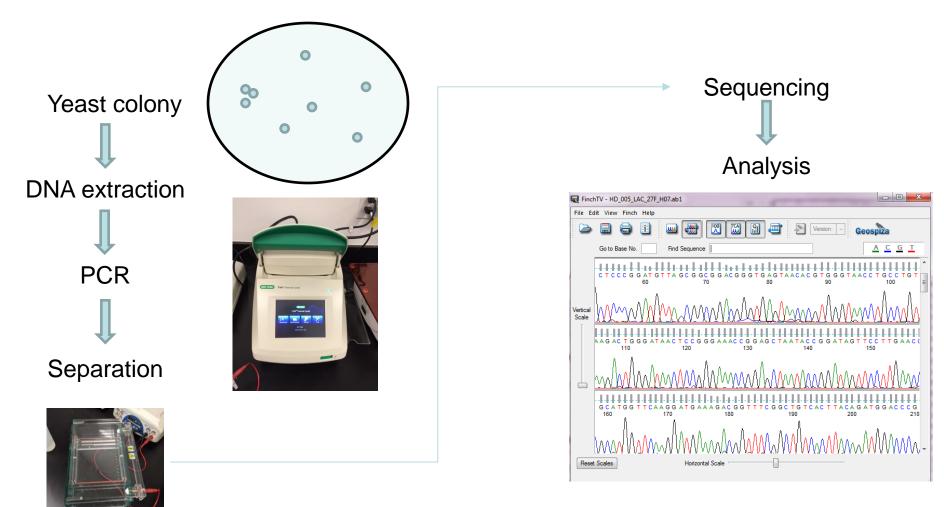
- Analysis for labeling for color, ABV, BU, calories
  - Entering new markets? Website?

 When it comes down to it quantitative metrics about your brews makes you and your brewery better

### Example of TPV

- Yeast found in barrel
  - -LCSM+
  - -WLD-
  - Round morphology, smaller than brewer's yeast (close in size to champagne yeast)
- They IDed as non-Saccharomyces wild yeast, wanted validation before bottling

## Example of TPV



The Science of Beer

### TPV doesn't stop here

- Third party validation can also be used for:
  - Validation of test methods
  - Validation of equipment
  - Validation of technician competency
  - Validation of laboratory competency

### Resources For You

- Analytical Food & Beverage Laboratories
- Local breweries with more advanced laboratories
- Biotech companies
- BAPS by LGC standards



# Creating Your Own Ring Studies

- Craft industry has an amazing collaborative feeling
  - QA/QC manager?
    - Try setting up your own ring studies locally with brewing labs near you
      - Learn from each other and validate each other
    - Similar benefits to accredited labs but more cost effective!

# ASBC Check Sample



ASBC > PUBLICATIONS & TOOLS > Check Sample









Methods of Analysis

Journal

Books

Fishbone References

Webinars

### Check Sample

Check Samples

Calibration and Standard Samples

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### Welcome to the ASBC Check Sample Program

Accuracy and quality control in the laboratory are the principles on which ASBC was founded as a scientific society. For more than 70 years, ASBC has aided malting and brewing laboratories in improving data accuracy and technical proficiency.

### Why ASBC Check Sample?

Participating laboratories rely on check sample services for a number of reasons, including:

- Comparison of subscriber results with those of other industry laboratories (results are anonymous)
- · Confirming analysis proficiency of laboratory personnel within the same facility or corporate multi-site system
- · Monitoring of instrumentation
- · Identification of areas for method improvement
- Benchmarking of best practices
- Qualification of contract laboratories
- Evaluation of alternative analytical methodologies
- Enhancement of process control capabilities by providing an independent means to assure gauge-related contributions to data variability
- Ensure accuracy of labeling information

# The Cons of Third Party Validation

- The Yin to the Yang
  - Cost per sample
  - Turn around time
  - Losing "control" over experimental set-up
  - Conflicting results

## The Take Away

- Third party validation is like partnering and expanding lab services
- TPV can be used to validate your results
- TPV is really secondary to a brewery's own internal QA program

### Questions?

THANK YOU!

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