ESSENTIAL INSTRUMENTATION FOR THE WINE LABORATORY – rAPID-XT

BROUGHT TO YOU BY ASTORIA-PACIFIC

SCOPE OF PRESENTATION

- Why Wine?
- TYPES OF ANALYZERS FOR WINE ANALYSIS
- rAPID-XT - AN EXAMPLE OF AN AFFORDABLE DISCRETE ANALYZER
- MOST COMMON AUTOMATED METHODS
- METHOD PROGRAMMING, EXAMPLE ACETIC ACID (enzymatic)
- DATA PARITY WITH REFERENCE LABORATORIES
- “EXPORTABLE” DATA, WHAT DO I DO WHEN THE RUN IS DONE?
- QUESTIONS?

WHY WINE?

The Wine Industry in the USA alone: Size / Annual Case Production / Number of Wineries

- Large-sized Wineries, 500K+ cases/year: 100
- Medium-sized Wineries, 50K – 500K cases/year: 300
- Small-sized Wineries, 5K – 50K cases/year: 1600
- Very Small Wineries, 1K – 5K cases/year: 3700
- Limited Production: <1K cases/year: ~4300

A total of 9997 Wineries in the USA.

ANALYZERS TYPES

SEGMENTED FLOW ANALYZERS

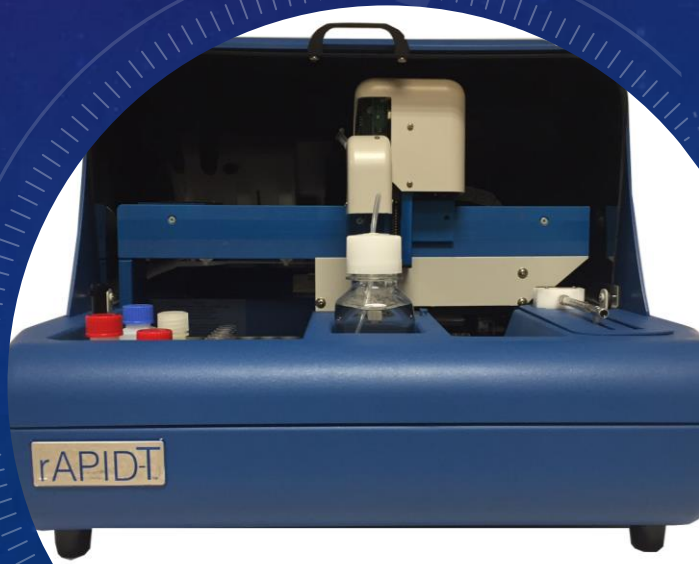
- “MACRO” SFA
- “MICRO” SFA

FLOW INJECTION ANALYZERS / FTIR

DISCRETE ANALYZERS

rAPID-XT

AN AFFORDABLE DISCRETE ANALYZER



rAPID-XT – AN AFFORDABLE DISCRETE ANALYZER

How does the rAPID-XT work?

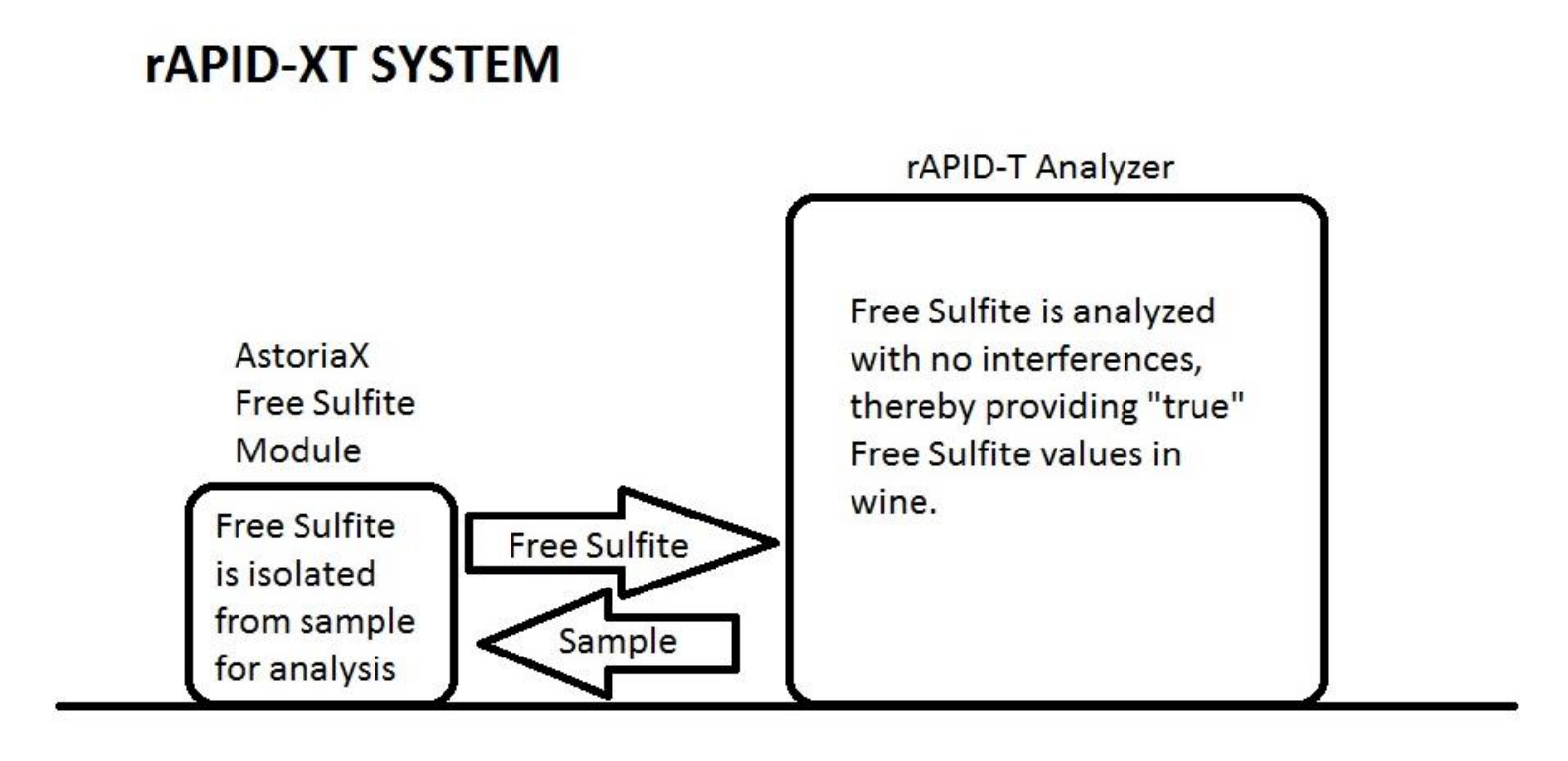
A discrete analyzer is an automated chemical analyzer in which the instrument performs tests on samples that are kept in discrete cuvettes in contrast to a continuous flow analyzer (SFA and/or FIA) that uses a peristaltic pump for a continuous stream of reagents.

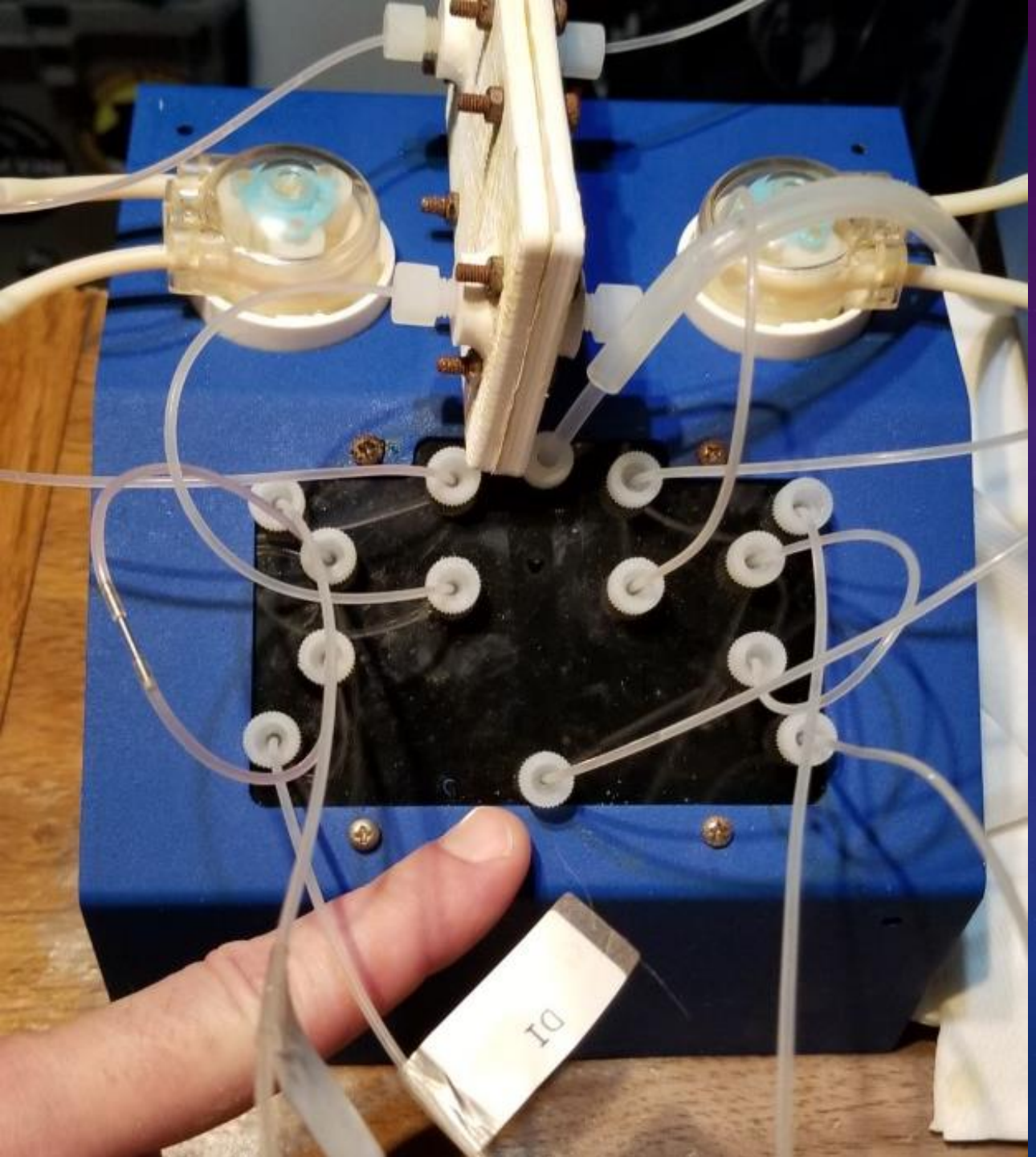
Typical automated discrete analysis workflow

rAPID-XT – AN AFFORDABLE DISCRETE ANALYZER

How does the Sulfite Module work?

The AstoriaX Free Sulfite module works in tandem with the primary rAPID-T analyzer. The integrated system processes the sample by isolating the Free Sulfite entirely from the wine matrix.





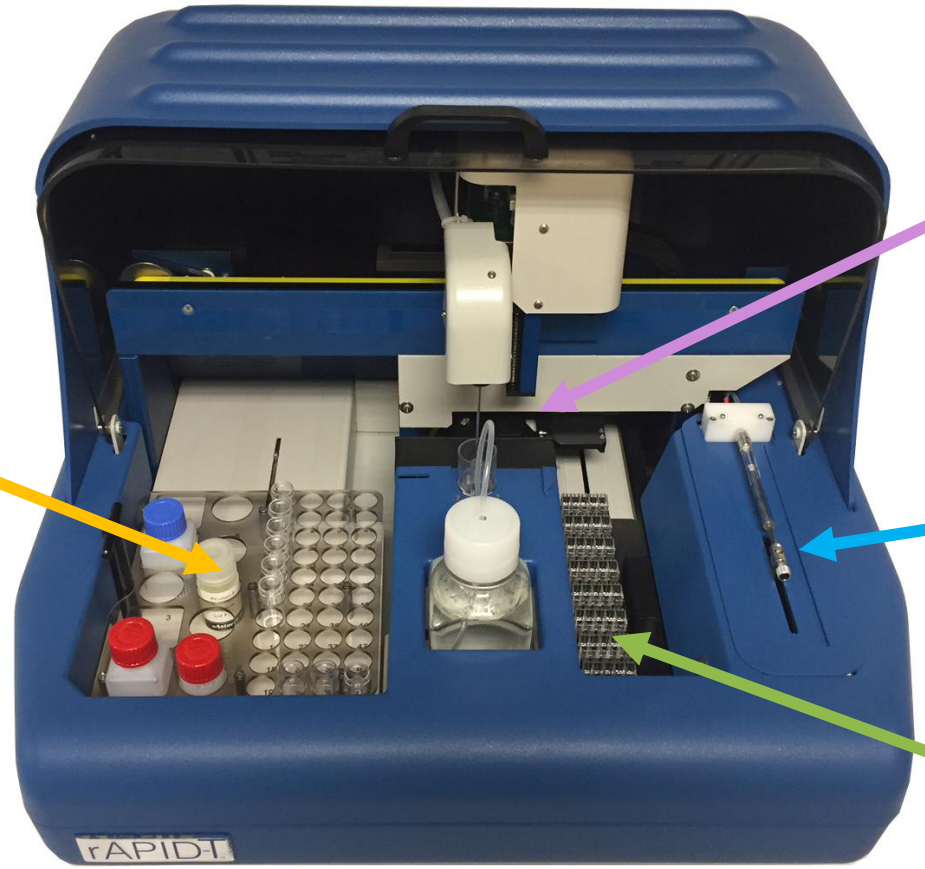
WORKING MODULE (PROTOTYPE)

The AstoriaX-FS* interfaces directly with the rAPID-T System. Software controls both the AstoriaX and rAPID-T with seamless integration.

*NOTE: There are some “prototype” pieces in this picture. The final product will be cleaner.

rAPID-XT – AN AFFORDABLE DISCRETE ANALYZER

Sample/Reagent Rack
- 40 Sample Positions
- 10 Reagent Positions

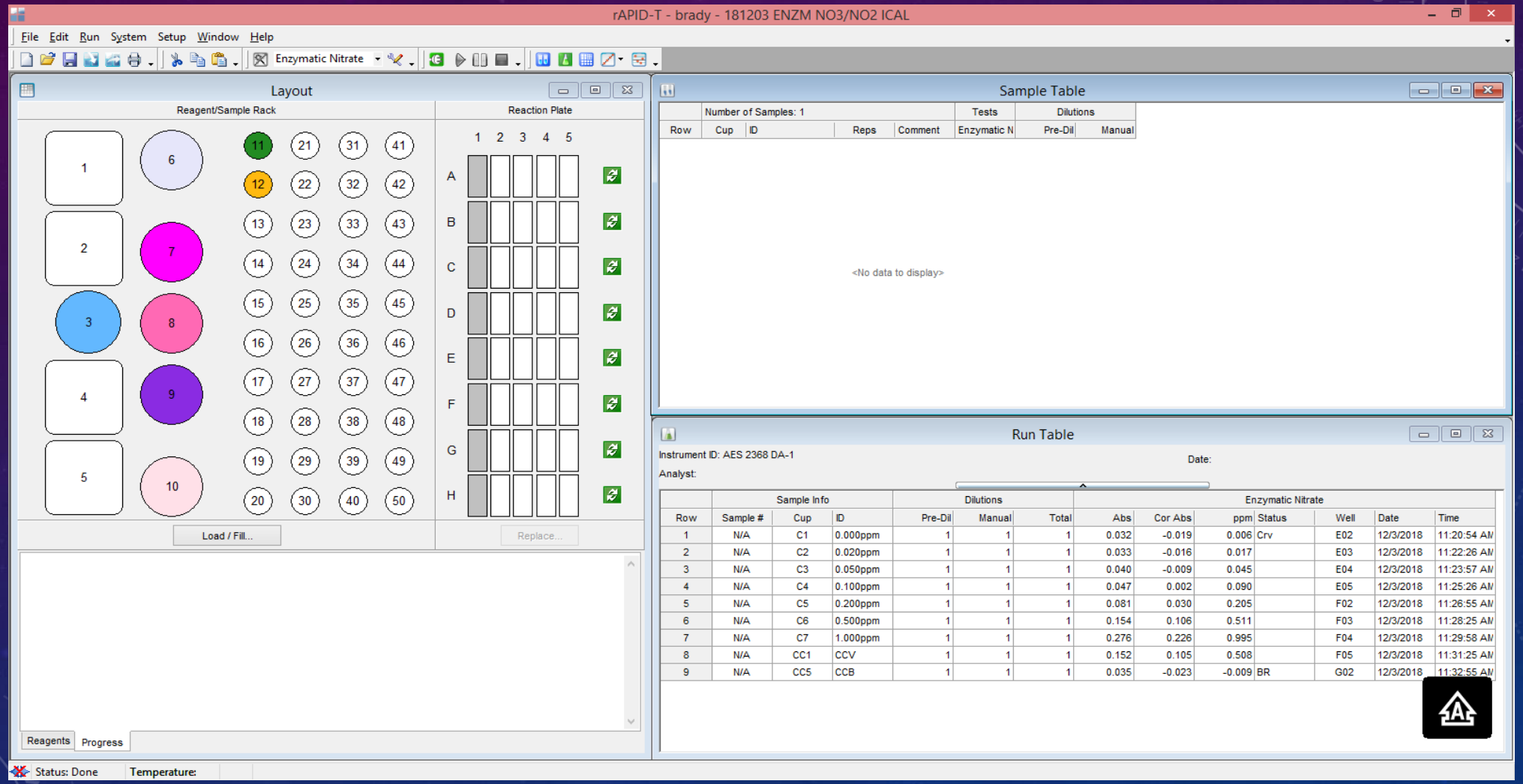


Photometer with 8 different analytical wavelengths

500uL Syringe

40 Cuvette Positions

rAPID-XT – AN EXAMPLE OF AN AFFORDABLE DISCRETE ANALYZER

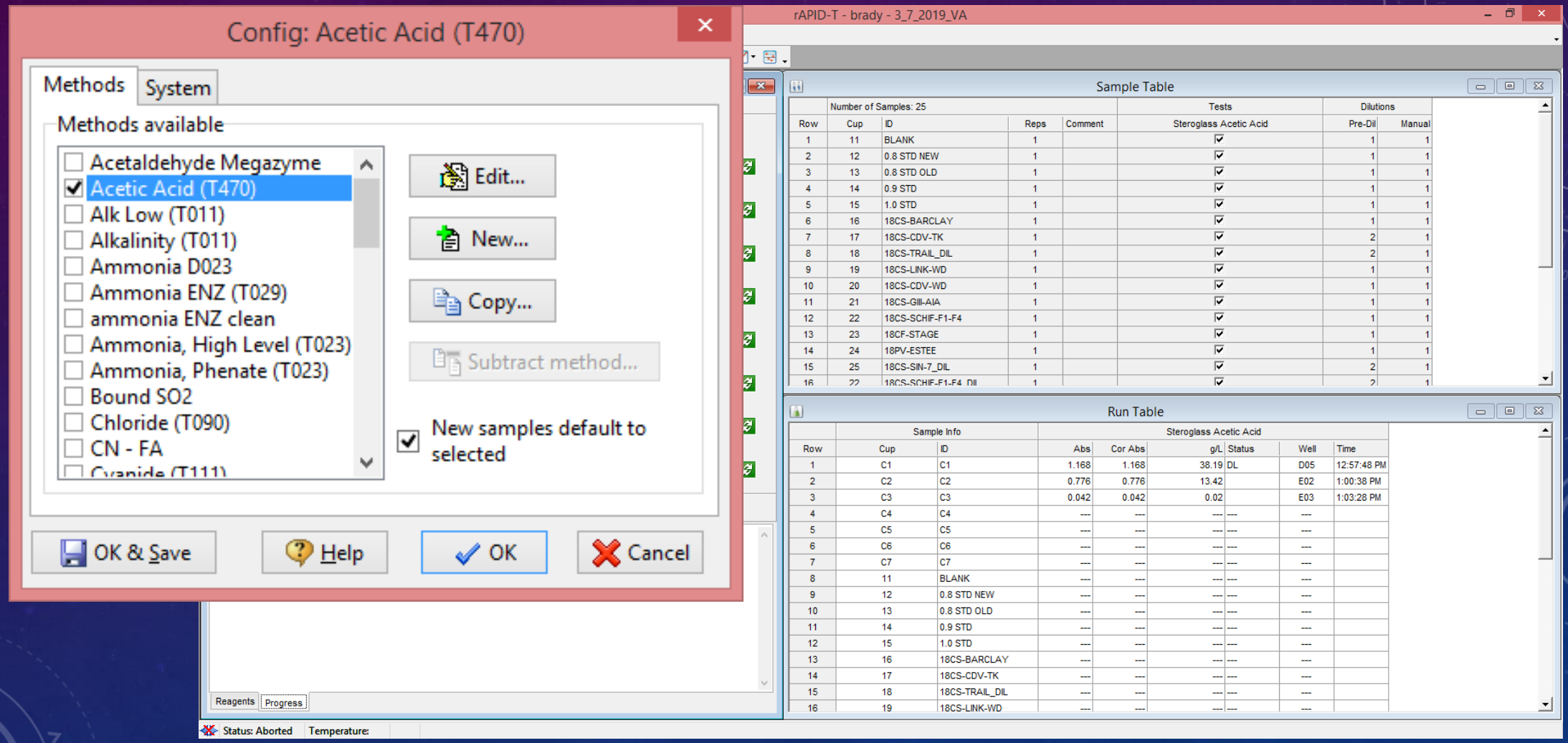


MOST COMMON AUTOMATED METHODS

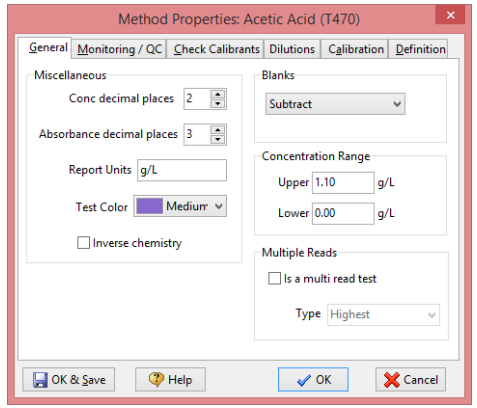
Test	Range	Tests/hour*
Acetic Acid	0.1 – 1.0 g/L	80
Ammonia	10 – 100 mg/L	80
Glucose+Fructose	0.1 – 6.0 g/L	100
Free Sulfite	2.0 – 100 mg/L	15
L-Malic Acid	0.05 – 3.0 g/L	100
NOPA	5.0 – 140 mg/L	80
Total Sulfite	5.0 – 200 mg/L	100

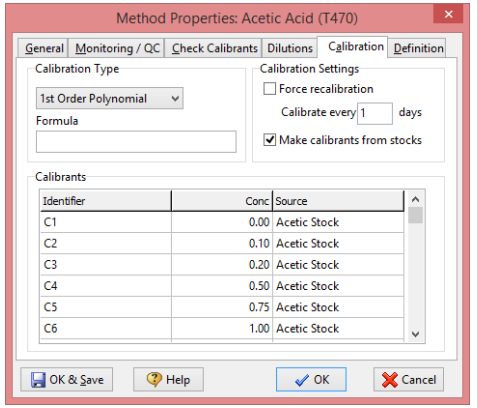
*NOTE: These are the most common tests requested by Astoria-Pacific's customers. There are various reagent kits offered by reagent kit manufacturers; however, Astoria-Pacific stocks only the most common reagent kits.

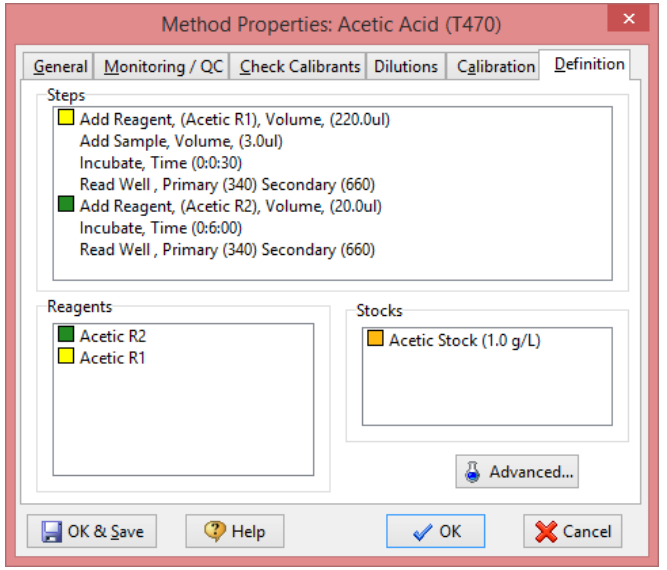
METHOD PROGRAMMING, EXAMPLE ACETIC ACID (ENZYMATIC)



PROGRAMMING METHODS



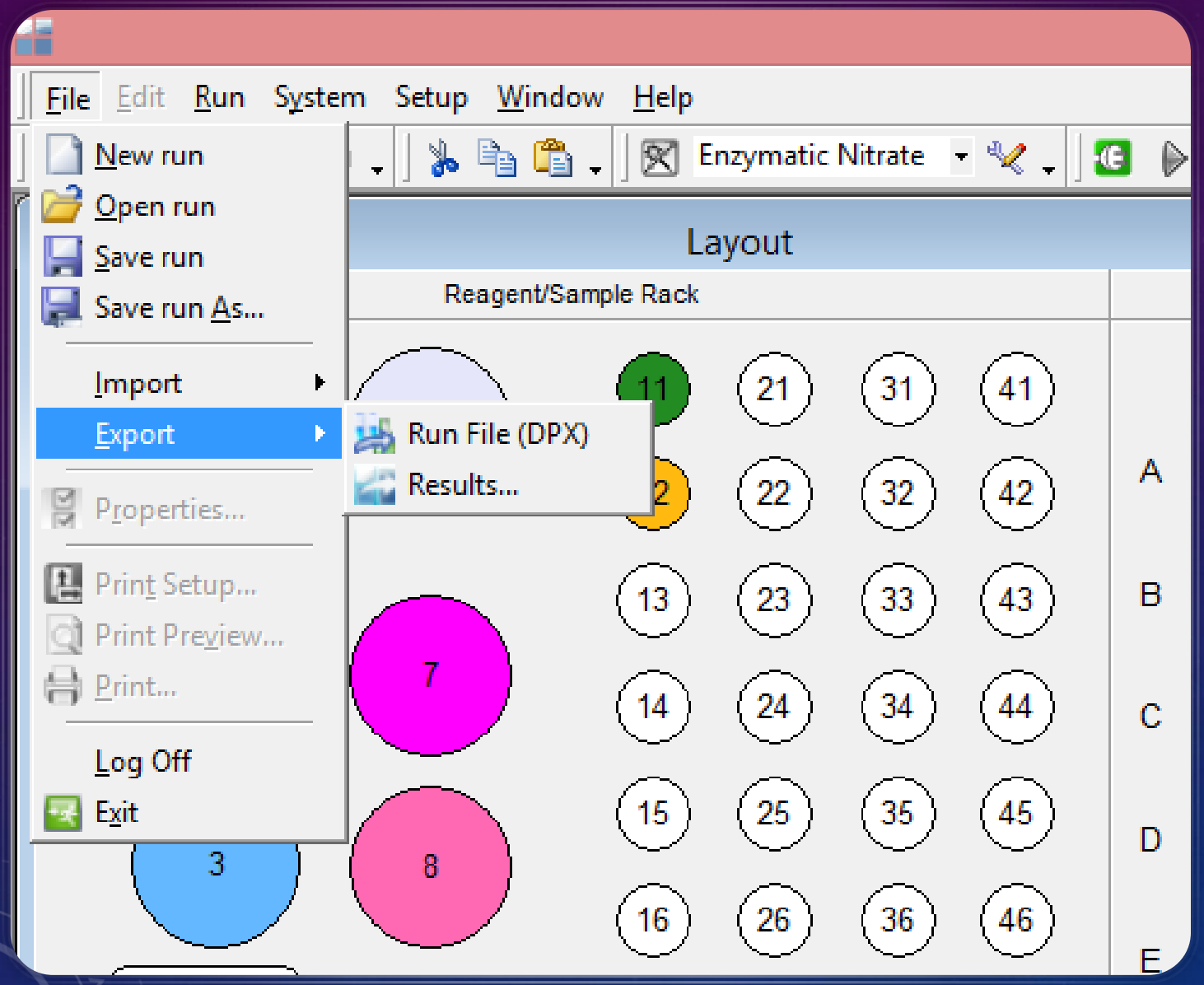


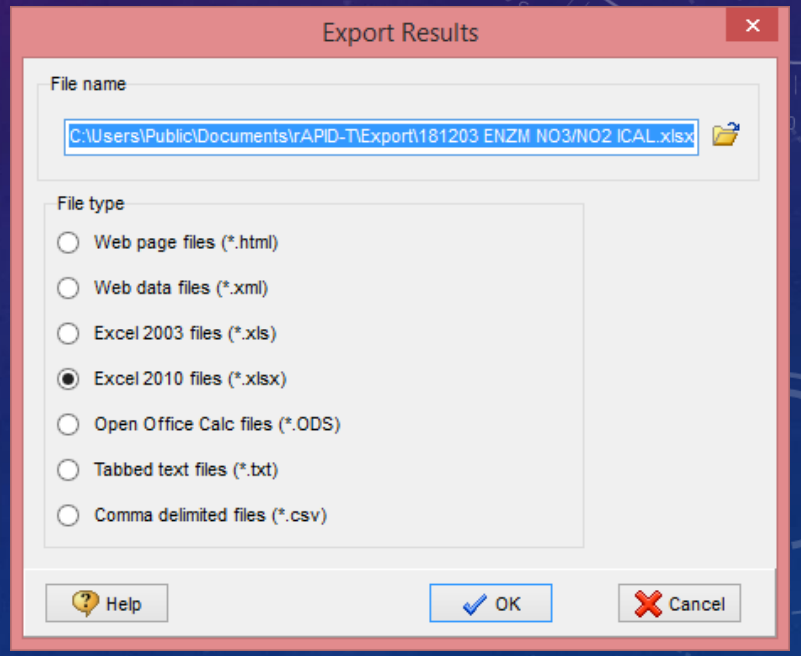


DATA QUALITY

- The rAPID™-XT system is an affordable automated solution for Free and Total Sulfite and other analyses, and it is ideal for small, medium and medium-large wineries.
- The rAPID-XT utilizes a propriety method for Free Sulfite. Prior to analysis, the Free Sulfite is isolated from the wine matrix, thereby ensuring quality data.
- By combining the already popular rAPID-T system with the new Astoria-X Free Sulfite module, Astoria-Pacific offers ease-of-mind by providing an instrument that provides data on par with your client’s reference lab of choice.

“EXPORTABLE” DATA: WHAT DO I DO WHEN THE RUN IS DONE?





CONTACT US FOR MORE INFO

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QUESTIONS???

- What questions might you have?
- Is Astoria-Pacific really based in Clackamas?
- How much wood could a woodchuck chuck if a woodchuck could chuck wood?
- How good are Brady’s juggling skills?