

REQUEST FOR LABORATORY ANALYSIS

ALAB SERVICE AGREEMENT



6 University Avenue, INN249, Wolfville, Nova Scotia B4P 2R6
 p: 902 698 1012 e: alab@acadiau.ca w: alab.acadiau.ca

Client Information

Name: _____ Organization: _____
 Email for Results: _____ Address: _____
 Email for Invoice: _____ Phone: _____

- ALAB collects non-identifiable data for ongoing statistical analysis and academic-related activities to better characterize products and improve our service offerings.
- ALAB is required to report on its activities, including the names of clients using ALAB services. If you would like to exclude your company name from reporting activities, please notify ALAB staff via email - alab@acadiau.ca. Please note that company-specific testing results are confidential and will not be released.
- Perennia can provide interpretation of testing results at no cost for Nova Scotia-based commercial producers through the services of a Winemaking and Innovation Specialist, Neslihan Ivit. For wineries outside of Nova Scotia, please contact Perennia (Neslihan Ivit email: nivit@perennia.ca) for information regarding fees. Please indicate below if you would like ALAB to release your data to the Perennia Winemaking and Innovation Specialist for assistance in interpreting your results.

I would like my results shared with the Winemaking and Innovation Specialist

I would NOT like my results shared

NOTES:

Sample Volume – minimum volumes listed. If multiple tests are required, please enquire about volume required.

- Wine/Cider/Mead – Minimum 150 mL – More will be needed for Cold/Heat Stability and Calorie Testing
- Must/Juice – Minimum 120 mL
- Grape – 200 Grape Berries – See page 3 for further grape analysis information

Grape Ripening Analysis:

In order to avoid overnight sample refrigeration and allow same day processing of the samples ALAB will accept grape and juice samples from **9 am to 3 pm**. Wine samples will be accepted from 9 am to 5 pm as usual.

If you have any detailed instructions, requests not covered by the sample submission form, or other questions or concerns regarding sample analysis, contact ALAB at 902-698-1012 or alab@acadiau.ca.

For ALAB Use:		Batch numbers	
Temperature Rec'd & Stored	R:	S:	
Date & Time Rec'd			
Received by			
Logged?			Data Send Date
Comments & Notes			

Sample Type abbreviations: White Wine-**WW**, Red Wine-**RW**, Grapes-**G**, Must-**M**, Must Under Fermentation-**MUF**, Cider-**C**, Mead - **D**

Client Sample ID	Sample Type	Comment – is sample 100% grape?	Sorbate added?
Ex. WWbatch1	WW	Pre-bottling sample, 100% grape	yes
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Analyses Required	Sample ID										
	Price	1	2	3	4	5	6	7	8	9	10
pH	\$6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brix	\$6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Density/Specific Gravity	\$6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conductivity and TDS	\$6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turbidity	\$6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FOSS for Must/Wine* (no SO ₂)	\$10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FOSS for whole grape*	\$20	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Classical – Wine, Mead, Cider	\$50	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
China Export	\$75	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yeast Count/Viability	\$40	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alcohol by Volume	\$25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free and Total SO ₂	\$30	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total Acidity	\$25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Colour Profile	\$15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YAN	\$30	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Calories and Carbohydrates	\$85	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total Anthocyanins	\$30	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total Polyphenols	\$30	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sugars**	\$40	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Organic Acids	\$45	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sorbic Acid	\$20	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volatile Acidity	\$25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cold Stability	\$22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heat Stability	\$22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ethyl Carbamate	\$130	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metals (As, Cd, Co, Cu, Pb)	\$85	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

See Pg 3 for package descriptions & combination/bulk rates and package pricing *Rapid analysis by FOSS is currently only available for Grape Wine and Must – Results are next business day. FOSS is not available for ciders and fruit wines. **Not available for ciders.

ALAB Packages (All prices as subject to change without notice):

- Basic Analyses:
 - pH - pH Meter - \$6
 - Brix - - Digital Density Meter - \$6
 - Density - Digital Density Meter - \$6
 - Conductivity and Total Dissolved Solids - Conductivity Meter - \$6
 - Turbidity - Nephelometer - \$6
- FOSS (FTIR) - \$10 for must/wine (liquid) and \$20 for whole grapes

<u>Must/Grape</u>		<u>Wine (100% grape based)</u>	
Brix	Total Acidity	Ethanol	Total Acidity (pH 8.2)
Density	Volatile Acidity	Density	Volatile Acidity
Glucose+Fructose	Potassium	Glucose+Fructose	Colour (A420, A520, A620)
Reducing Sugar	Organic Acids (Tartaric, Malic, Citric)	Reducing Sugar	Hue & Intensity
pH	YAN	pH	Organic Acids (Tartaric, Malic, Lactic)

- Classical by Skalar Continuous Flow Analyzer, Alcoalyzer, and HPLC-UV-Vis (Grape wine, fruit wines, cider, mead) - Ethanol, Total Acidity, Volatile Acidity, Total Reducing Sugar, Sorbic Acid, Free SO₂, Total SO₂, pH - \$50
- China Export - Classical package + Molecular SO₂, Total Volume, Specific Gravity, and Total Dry Matter - \$75
- Yeast Count/Viability - Beckman Vi-Cell XR - \$40
- Alcohol by volume – Alcoalyzer (NIR/DMA) - \$25
- Free and Total SO₂ - Skalar Continuous Flow Analyzer - \$30
- Total Acidity - Skalar Continuous Flow Analyzer - \$25
- Colour Analysis - Spectrophotometer - Absorbance at 280, 420, 520, 620 nm and calculated Hue and Intensity for Red Wines - \$15
- YAN (Yeast Assimilable Nitrogen) - Enzymatic Kit - \$30
- Grape Ripening - FOSS (FTIR) - \$20
- Calories and Carbohydrates - AOAC methods, ABV analysis included - \$85
- Total Anthocyanins - Spectrophotometer - \$30
- Total Polyphenols - Spectrophotometer - \$30
- Sugars (not available for ciders) - HPLC-RI - Glycerol, Fructose, Glucose, Galactose, Sucrose, Maltose, Lactose - \$40
- Organic Acids - HPLC-UV-Vis – Oxalic, Tartaric, Malic, Lactic, Acetic, Citric, Succinic Acids - \$45
- Volatile Acidity - HPLC-UV-Vis - \$25
- Sorbic Acid - HPLC-UV-Vis - \$20
- Cold Stability - 30-minute contact time conductivity with potassium bitartrate at 0C or 4C - \$22
- Heat Stability - 2 hour hold at 80C with turbidity measurements - \$22
- Ethyl Carbamate – Gas Chromatography Mass Spectrometry (GC-MS) - \$130
- Metals (Arsenic (As), cadmium (Cd), cobalt (Co), copper (Cu), lead (Pb)) - Inductively Coupled Plasma Mass Spectrometry (ICP-MS) - \$85

Bulk rates – Submission of 5 or more samples will result in a 5% discount, 10 or more samples will be discounted 10%, and 20 or more samples will be discounted 15%. Bulk rates only apply to same-type analysis submitted simultaneously.

Turnaround Times:

Foss Rapid Analysis – Next Business Day (from receipt of samples & submission form)

Other Analyses and Packages – Depending on sample receipt, analyses needed and lab capacity, the sample testing takes between 3 – 10 business days. Upon testing completion, a Certificate of Analysis will be emailed as a PDF attachment.

Submitting Samples:

Step 1 Complete the ALAB Service Agreement form on pages 1 & 2 (either by hand or in Acrobat using the fill and sign function).

Step 2 Print the completed ALAB Service Agreement form and place inside a suitable shipping box containing the sample(s). Juice or samples that are fermenting must be shipped/delivered on ice.

Step 3 Clearly label the sample(s) with your Client Sample ID indicating the type of product and a number
Note: a minimum of 150 mL of each sample is required – see page 1

Step 4 Affix the shipping label below to the box. Wrap bottles individually if mailing.

Step 5 Mail or drop off the sample(s) – please email ahead of time if dropping off samples.
Drop off at David Huestis Innovation Pavilion (between 8:30 and 4:30, or by special arrangements)
Enter main doors of Elliott Hall (6 University Ave.). Take the stairs on the left to the second floor McCain Commons. Cross the walkway to Room 249 (alab). If no one is there, leave the package outside the lab – please email alab@acadiau.ca or text 902-698-1012 to notify the lab technician that it has been left.

Step 6 ALAB staff will analyze the sample(s) within the standard turnaround time.

Step 7 ALAB staff send results when the analysis is completed and will invoice to the client at the end of the month, payment is requested immediately.

Shipping Label:

SHIP TO:

ALAB



Acadia University

15 University Avenue
Wolfville, NS, Canada
B4P 2R6