

# REQUEST FOR LABORATORY ANALYSIS

## ALAB SERVICE AGREEMENT



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### Client Information

Name: \_\_\_\_\_ Organization: \_\_\_\_\_  
 Email for Results: \_\_\_\_\_ Address: \_\_\_\_\_  
 Email for Invoice: \_\_\_\_\_ Phone: \_\_\_\_\_

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- 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](mailto:alab@acadiau.ca). Please note that company-specific testing results are confidential and will not be released.
- Please check this box if you are using the results of this analysis for product research & development.**

### 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
  - LC Panel testing requires one full retail packaged product
  - We recommend removing as much air space above the sample as possible
- Must/Juice – Minimum 120 mL
- Grape – 200 Grape Berries – See page 3 for further grape analysis information

**Samples will be retained for a maximum of 5 business days after results have been sent.**

### Grape Ripening Analysis:

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](mailto:alab@acadiau.ca).

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

Sample Types: White Wine-**WW**, Red Wine-**RW**, Grapes-**G**, Must-**M**, Fermenting Must-**MUF**, Cider-**C**, Mead – **D**, Fruit Wine – **FW**

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	Price	1	2	3	4	5	6	7	8	9	10
pH <sup>AT</sup>	\$7	<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	\$7	<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 <sup>AT</sup>	\$7	<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	\$7	<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 <sup>AT</sup>	\$7	<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 <sub>2</sub> )	\$11	<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*	\$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"/>
Classical <sup>AT</sup> – Wine, Mead, Cider	\$55	<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	\$83	<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 – See pg 3	\$80	<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 <sup>AT</sup>	\$28	<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 <sub>2</sub> <sup>AT</sup>	\$33	<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 <sup>AT</sup>	\$28	<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	\$17	<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	\$33	<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	\$94	<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	\$33	<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	\$33	<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 Profile <sup>AT**</sup>	\$44	<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 Reducing Sugars <sup>AT</sup>	\$28	<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 Profile	\$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"/>
Single Organic Acid (e.g. Malic)	\$28	<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 <sup>AT</sup>	\$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"/>
Cold Stability	\$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"/>
Heat Stability	\$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"/>
Ethyl Carbamate <sup>AT</sup>	\$143	<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 <sup>AT</sup> (As, Cd, Co, Cu, Pb)	\$94	<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"/>
LC Panel – see pg 3	\$250	<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"/>

AT: Accredited Test; HST not included in pricing; See Pg 3 for bulk rates\* 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<sup>AT</sup> - pH Meter - \$7
  - Brix - - Digital Density Meter - \$7
  - Density<sup>AT</sup> - Digital Density Meter - \$7
  - Conductivity - Conductivity Meter - \$7
  - Turbidity<sup>AT</sup> - Nephelometer - \$7
- FOSS (FTIR) - \$11 for must/wine (liquid) and \$22 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, Alcolyzer, and HPLC-UV-Vis (Grape wine, fruit wines, cider, mead) - Ethanol<sup>AT</sup>, Total Acidity<sup>AT</sup>, Volatile Acidity<sup>AT</sup>, Total Reducing Sugar<sup>AT</sup>, Sorbic Acid<sup>AT</sup>, Free SO<sub>2</sub><sup>AT</sup>, Total SO<sub>2</sub><sup>AT</sup>, pH<sup>AT</sup> - \$55
- China Export - Classical package + Molecular SO<sub>2</sub>, Total Volume, Specific Gravity<sup>AT</sup>, and Total Dry Matter - \$83
- Yeast Count/Viability - Beckman Vi-Cell XR - \$80
  - **Note:** This assay is to assess count and viability for stuck fermentations or pre-pitching concentrations. This assay is **not suitable** for determining the absence of yeast in a finished product (e.g. to assess filtration success)
- Alcohol by volume<sup>AT</sup> – Alcolyzer (NIR/DMA) - \$28
- Free and Total SO<sub>2</sub><sup>AT</sup> - Skalar Continuous Flow Analyzer - \$33
  - **Note:** Samples requiring SO<sub>2</sub> analysis will be run on the Skalar on a next-day basis, as the reagent prep needs to be done 24 hrs in advance. Samples for SO<sub>2</sub> can be run Tuesday-Friday as long as we have advance notice to prepare the reagent.
- Total Acidity<sup>AT</sup> - Skalar Continuous Flow Analyzer - \$28
- Colour Analysis - Spectrophotometer - Absorbance at 280, 420, 520, 620 nm and calculated Hue and Intensity for Red Wines - \$17
- YAN (Yeast Assimilable Nitrogen) - Enzymatic Kit - \$33
- Calories and Carbohydrates - AOAC methods, ABV analysis included - \$94
  - **Note:** Total carbohydrate value is given, if total sugar value is also required, please add total reducing sugar (\$28) or sugar profile (\$44) to your request.
- Total Anthocyanins - Spectrophotometer - \$33
- Total Polyphenols - Spectrophotometer - \$33
- Sugars Profile<sup>AT</sup> (not available for ciders) - HPLC-RI - Glycerol, Fructose, Glucose, Galactose, Sucrose, Maltose, Lactose - \$44
- Total Reducing Sugars<sup>AT</sup> - Skalar Continuous Flow Analyzer - \$28
- Organic Acids Profile - HPLC-UV-Vis – Oxalic, Tartaric, Malic, Lactic, Acetic, Citric, Succinic Acids - \$50
- Single Organic Acid - HPLC-UV-Vis - \$28
- Sorbic Acid<sup>AT</sup> - HPLC-UV-Vis - \$22
- Cold Stability - 30-minute contact time conductivity with potassium bitartrate at 0C or 4C - \$25

- Heat Stability - 2 hour hold at 80C with turbidity measurements - \$25
  - Minimum 2 business day turnaround time
- Ethyl Carbamate<sup>AT</sup> – Gas Chromatography Mass Spectrometry (GC-MS) - \$143
- Metals<sup>AT</sup> (Arsenic (As), cadmium (Cd), cobalt (Co), copper (Cu), lead (Pb)) - Inductively Coupled Plasma Mass Spectrometry (ICP-MS) - \$94
- Liquor Corporation Panel for Wines, Ciders, and Wine/Cider Based Ready to Drink beverages - \$250
  - Includes: Alcohol, total reducing sugar, volatile acidity (wine/cider), total SO<sub>2</sub>, free SO<sub>2</sub>, sorbic acid, ethyl carbamate, arsenic, cadmium, cobalt, copper (wine), lead, synthetic dyes (where applicable).
  - **Note:** To ensure that the Certificate of Analysis (CoA) provided for the Liquor Corporation Panel will be accepted by the jurisdiction/country you want to be listed with, it is your responsibility to check the listing requirements.

### **Bulk rates**

Submission of 5 or more samples will result in a 5% discount, 10 or more samples will be discounted 10%. Bulk rates only apply to same-type analysis submitted simultaneously. Bulk rates do not apply to the Liquor Corporation Panel and assays priced at less than \$15/assay.

### **Turnaround Times**

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

**Other Analyses and Packages** – Typical turnaround time is 3-10 business days after receipt of samples and forms.

Volume of testing may affect turnaround times.

**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: See Page 1 for minimum sample volumes.*
- 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](mailto: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

