

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.

NOTES:

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

- Beer/mead/wort – Minimum 150 mL, Calories and Carbohydrates require 1 can minimum
- Hops – Obtain a representative sample of ~100g. Dry cones (10% moisture), pellets, or wet hops accepted.
 - Representative samples should be taken from at least 4 locations depending on sample type
 - In the yard – select from different plants and locations
 - Post-harvest/palletization – select from bottom, top, and sides of piles
 - Post bagging/baling – choose samples from multiple bags or bales and positions within

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: Beer-**B**, Wort- **W**, Hops, Pelleted - **P**, Hops, Leaf - **L**

Client Sample ID		Sample Type	Comment									Sorbate added?
Ex.	Lager-Batch1	B	Pre-canning sample									no
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"/>	
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"/>	
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"/>	
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"/>	
Chill Haze	\$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"/>	
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"/>	
Total SO2	\$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"/>	
Sugar Profile	\$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"/>	
Calories and Carbohydrates (includes ABV & Protein)	\$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"/>	
Protein	\$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"/>	
Organic Acid Profile	\$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"/>	
Individual organic acid (lactic, acetic)	\$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"/>	
Sorbic Acid	\$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"/>	
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"/>	
Iso-Alpha Acids (IBU)	\$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"/>	
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"/>	
Caffeine	\$47.50	<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"/>	
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"/>	
Hops: Alpha and Beta 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"/>	
Hops storage index	\$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"/>	
Hops Moisture content	\$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"/>	
Hops Package	\$70	<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 bulk rates

ALAB Analyses:

Beer/Wort

- Basic Analyses:
 - pH - pH Meter - \$6
 - Density/Specific Gravity - Digital Density Meter - \$6
- YAN (Yeast Assimilable Nitrogen) - Enzymatic Kit - \$30
- Yeast Count/Viability - Beckman Vi-Cell XR - \$40
- Chill haze - ASBC 27-1b Nephelometric method - \$20
- Alcohol by volume – Alcolyzer (NIR/Density) - \$25
- Total SO₂ - Skalar Continuous Flow Analyzer - \$30
- Total Acidity (g/L Lactic acid) - Skalar Continuous Flow Analyzer - \$25
- Sugar Profile (beer & wort) - HPLC-RI - Fructose, Glucose, Galactose, Sucrose, Maltose, Lactose - \$40
- Calories and Carbohydrates - AOAC methods, ABV & protein measurement included - \$85
- Protein - ASBC spectrophotometric method - \$10
- Organic Acid Profile - HPLC-UV-Vis - Tartaric, Malic, Lactic, Acetic, Citric, Succinic Acids - \$45
- Individual Organic acid - HPLC-UV-Vis - Lactic or Acetic - \$25
- Sorbic Acid - HPLC-UV-Vis - \$30
- Volatile Acidity - HPLC-UV-Vis - \$25
- Iso-Alpha Acids - IBU measurement by HPLC-UV-Vis - \$30
- Colour Analysis (beer and wort) - Spectrophotometer - ASBC/EBC/CIELAB Tristimulus Values - \$15
- Caffeine - HPLC-UV-VIS - \$47.50
- Ethyl Carbamate – Gas Chromatography Mass Spectrometry (GC-MS) - \$130
- Metals (Arsenic, cadmium, cobalt, copper, lead) - Inductively Coupled Plasma Mass Spectrometry (ICP-MS) - \$85

Hops

- Alpha and Beta acids- Solvent extraction and HPLC-UV-VIS - \$45
- Hops Storage Index - Solvent extraction and spectrophotometry - \$15
- Moisture Content - Air oven - \$30
- Hops Package - Alpha and Beta Acids, HSI, Moisture - \$70

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:

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