Beer Analysis Services

Beer analysis services are performed on finished packaged products shipped to our facility. For alternate sample collection, please contact us directly at 604.599.2782.

<table>
<thead>
<tr>
<th>TEST</th>
<th>ANALYSIS</th>
<th>PRICE (CAD $)</th>
<th>BOTTLE QUANTITY/ SAMPLES REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive Analysis</td>
<td>AE, RE, Alcohol, Colour, pH, Foam, COE, CO₂, Bitterness</td>
<td>$160</td>
<td>4</td>
</tr>
<tr>
<td>Partial Analysis</td>
<td>AE, RE, Alcohol, Colour, pH, COE</td>
<td>$60</td>
<td>2</td>
</tr>
<tr>
<td>Partial Analysis (5 or more samples)</td>
<td>AE, RE, Alcohol, Colour, pH, COE</td>
<td>$40/ sample</td>
<td>2</td>
</tr>
<tr>
<td>Individual Analysis</td>
<td>CO₂</td>
<td>$20</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Foam</td>
<td>$30</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Bitterness</td>
<td>$35</td>
<td>2</td>
</tr>
</tbody>
</table>

Updated Sept. 22, 2016

Analysis Descriptions

**AE — Apparent Extract:**
A measurement of the gravity of beer. The apparent extract does not take into account the effect of the presence of alcohol in finished beer.

**CO₂ — Carbon Dioxide**

**COE — Calculated Original Extract:**
The initial specific gravity of the wort calculated from the alcohol content and the apparent extract (AE).

**pH — Acidity/Alkalinity:**
Measures the acidity/alkalinity so levels can be adjusted to the desired taste outcome.

**RE — Real Extract:**
A calculation of the gravity of beer. The real extract (residual sugars) concentration of finished beer, accounting for the actual alcohol content. The difference between the wort gravity readings and the RE will lead to your real attenuation value.

Results

Generally, results take 2-3 weeks. All reports will be emailed unless otherwise requested.

Technicians

All analysis services are conducted by trained lab technicians and overseen by KPU Brewing instructor and microbiologist Martina Solano Bielen, M.Sc., B.Sc.

General Policies

The prices listed above are for single samples. Analysis is performed on finished packaged product. Prices are subject to change at any time. All reports and internal records pertaining to a report are held in strict confidence. Reports are submitted for the exclusive use of the client. Any reproduction of a report must be approved by Kwantlen Polytechnic University.

Payment

Customers are required to pay in advance for all analysis services. Please fill out your request online at kpu.ca/beeranalysis. For more information, please call DeAnn at 604-599-2782 or email deann.bremner@kpu.ca.
Analytical Equipment

The KPU Brewing Laboratory equipment consists of:

- Jenway 6405 UV/Vis. Spectrophotometer
- Anton-Paar Alex 500 Alcohol and Extract Meter for Beer
- Zahm & Nagel Direct DV-1 CO₂ Analyzer
- CO₂ and O₂ Meter — c-DGM (Pentair), Haffmans ISD Inpack 2000 Sampling Device (Pentair)
- Haffmans NIBEM Foam Stability Tester (Pentair)
- Hanna Beer Analysis pH Meter
- Burrell Wrist Action Shaker

Shipping Samples

Please clearly mark label on the outside of the box with:
“Samples for Analysis Only, Not for Human Consumption”

Attn: KPU Brewing Laboratory Services  
Kwantlen Polytechnic University  
Office 1040  
20901 Langley Bypass  
Langley, BC V3A 8G9

Please ensure glass bottles are securely packed to avoid breakage when shipped.
Analysis Request Form (fill in and include in shipping box)

Please mark shipment as follows:

“Samples for Analysis Only, Not for Human Consumption”

SEND TO:  
KPU Brewing Laboratory Services  
Kwantlen Polytechnic University  
Office 1040  
20901 Langley Bypass  
Langley, BC  V3A 8G9

PAYMENT:  
Customers are required to pay in advance for all analysis services. Please go to kpu.ca/beeranalysis or call 604-599-2782.

Date sending your samples:  

Name of person requesting analysis:  

Phone number:  Email:

<table>
<thead>
<tr>
<th>Sample Description</th>
<th>Style</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(e.g., Comprehensive Analysis, Individual Analysis (incl. Service, such as CO₂, etc.), Microbiological Analysis, etc.)</td>
</tr>
</tbody>
</table>