KPU - AGC Hops Service Certificate of Analysis

Customer:	Ray Bredenhof
Date of Arrival:	Sep.28, 23
Date of Analysis:	Oct.3, 23
Date of Report:	Oct.4, 23
Hop/Sample Name:	Chinook
Sample Form:	Dried Flower
Mass of Hops (g):	118

Report Number:57-RBOption:Applied
Genomics
CentreKwantlen Polytechnic University
12666 72nd Ave
Surrey, BC
V3W 2M8

Alpha/Beta Acid Analysis - ASBC Hops-14 Method

	Percent (%) by Mass
Alpha Acids	
Cohumulone	2.35
n+Adhumulone	5.17
Total Alpha Acids	7.52
Beta Acids	
Colupulone	1.34
n+Adlupulone	1.26
Total Beta Acids	2.60
HSI	0.23

Essential Oil Analysis - EBC 7.12 Method

· · · · · ·	mg per g of Hops	Percent (%) by Hops Mass
β-Myrcene	1.80	0.18
β-Caryophyllene	0.45	0.05
trans-β-Farnesene	0.01	0.00
α-Humulene	0.81	0.08
Total 4 Major Hops Oils	3.1	0.31

Analytical methods as noted in link below:

https://www.kpu.ca/sites/default/files/Applied%20Genomics%20Centre/KPU_Hops_Testing_Info.pdf

Terms and Conditions:

https://www.kpu.ca/sites/default/files/Applied%20Genomics%20Centre/KPU_Hops_Testing_Services_Terms_and_Conditions.pdf

Samples kept for 1 month post-testing

Data reviewed by:

Mathias Schuetz, PhD KPU Applied Genomics Center