

# PRE-HARVEST HOP CERTIFICATE OF ANALYSIS



To: Justin Gloede - Hidden Valley Hops Farm

Sample ID: Chinook  
(Pre-Harvest)

Variety: Chinook

Certifying Officer: Zach Lilla - Lab Manager

Date : 9/8/2020

TTB Certified Chemist - Member AOAC - ASBC - BJCP

Method				
Hops-4C	Moisture Analysis	% Moisture	75.0	
		% Dry Matter	25.0	
Hops-12	Hop Storage Index	HSI	0.289	
Hops-13	Total Essential Oil	mL/100g	NT	(as is)
Hops-14 ICE-4	Alpha & Beta Acids by HPLC	Cohumulone	29.2	(% of Total AA)
		Total % Alpha Acids	3.16	(as is)
		Colupulone	55.3	(% of Total BA)
		Total % Beta Acids	0.77	(as is)
		a/b ratio	4.12	
Hops-17	Hop Essential Oil by GC-FID as a % of total oil	B-Pinene	NT	
		Myrcene	NT	
		Linalool	NT	
		Caryophyllene	NT	
		Farnesene	NT	
		Humulene	NT	
		Geraniol	NT	
NT=NOT TESTED				

	Chinook Typical Ranges	Pre-Harvest Results	
Dry Matter	22 - 26%	25.0	✓
% Alpha	11.5 - 15%	11.40	↓
% Beta	3.0 - 4%	2.76	↓
Cohumulone	27 - 31%	29.2	✓
Total Oil	1.0 - 2.5 mL	NT	NT

Note: Pre-Harvest Results are calculated based on a 10% final dried target moisture.

Note: With fresh wet hops, due to variations in handling, values corrected for moisture are no indication of a dried post processed A/B or oil content.

Signed:   
Zachary Lilla - Lab Manager - TTB Certified Chemist

