



YAKIMA QUALITY HOPS

Testing completed by:



Certificate of Analysis

CoA ID	Date of Issue	Test Date
AMA-2403	10/28/2024	10/18/2024, 10/25/2024

Sample Type	Variety	Total Oil (mL/100G)
T90 Pellet	Amarillo® (VGXP01)	1.2
Alpha %	Beta %	HSI
7.7	5.1	0.262
HopTechnic-008 (Alpha & Beta Acids by HPLC, Modified EBC 7.8)		
HopTechnic-008 (HSI Determination by Calculation, Modified EBC 7.8)		
HopTechnic-116 (Total Oil Determination, ASBC Hops-16)		

Released by:  _____

Date: 10/28/2024



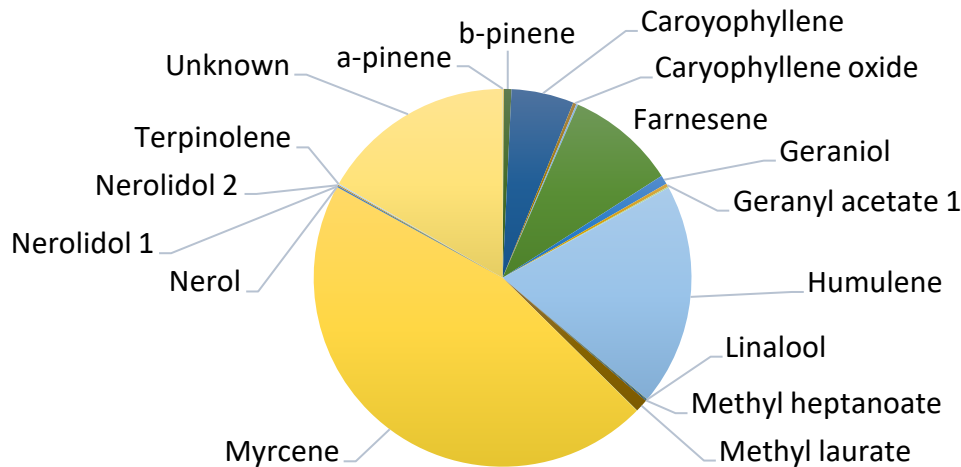
YAKIMA QUALITY HOPS

Testing completed by:



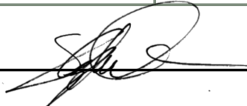
Hop Oil Composition

CoA ID	Date of Issue	Test Date
AMA-2403	10/28/2024	10/25/2024
Sample Type	Variety	Total Oil (mL/100g)
T90 Pellet	Amarillo® (VGXP01)	1.3
HopTechnic-116 (Total Oil Distillation, ASBC Hops-16)		
HopTechnic-116 (Terpenes Composition Analysis by GC-FID, modified ASBC Hops-17)		



Aroma Compound	% of Total Oil
2-Undecanone	0.00%
a-pinene	0.05%
B-ionone	0.06%
b-pinene	0.65%
Caryophyllene	5.35%
Caryophyllene oxide	0.28%
Citral	0.00%
Citronellene	0.14%
Citronellol	0.00%
Farnesene	9.39%
Geraniol	0.77%
Geranyl acetate 1	0.28%
Geranyl acetate 2	0.10%

Aroma Compound	% of Total Oil
Humulene	19.05%
Limonene	0.01%
Linalool	0.06%
Methyl Heptanoate	0.09%
Methyl Laurate	1.09%
Methyl Octanoate	0.02%
Methyl thiohexanoate	0.00%
Myrcene	45.56%
Nerol	0.01%
Nerolidol 1	0.12%
Nerolidol 2	0.10%
Ocimene	0.01%
Terpinolene	0.10%
Unidentified	16.68%

Released by: 

Date: 10/28/2024

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509-865-6422

*Results are related only to the samples tested and may or may not be representative of the lot.

COA Rev. YQH 10/28/24

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