



YAKIMA QUALITY HOPS


Testing completed by:



Certificate of Analysis

CoA ID	Date of Issue	Test Date
CAS-2401	11/19/2024	11/14/2024

Sample Type	Variety	Total Oil (mL/100G)
T90 Pellet	Cascade	1.4
Alpha %	Beta %	HSI
5.7	7.5	0.233
ASBC Hops-6A (Alpha Acid Determination by UV-Spectrophotometry)		
ASBC Hops 6A (HSI by UV Spectrophotometry)		
HopTechnic-116 (Total Oil Determination, ASBC Hops-16)		

Released by:  _____

Date: 11/19/2024



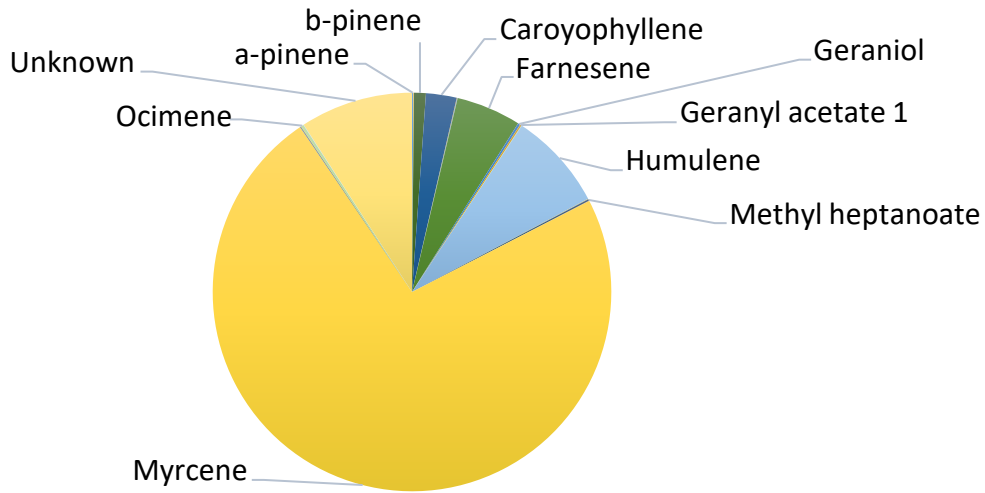
YAKIMA QUALITY HOPS

Testing completed by:



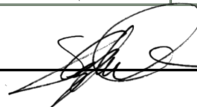
Hop Oil Composition

CoA ID	Date of Issue	Test Date
CAS-2401	11/19/2024	11/14/2024, 11/18/2024
Sample Type	Variety	Total Oil (mL/100g)
T90 Pellet	Cascade	1.4
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	0.11%
B-ionone	0.05%
b-pinene	0.96%
Caryophyllene	2.49%
Caryophyllene oxide	0.03%
Citral	0.00%
Citronellene	0.04%
Citronellol	0.00%
Farnesene	5.26%
Geraniol	0.19%
Geranyl acetate 1	0.13%
Geranyl acetate 2	0.03%

Aroma Compound	% of Total Oil
Humulene	7.97%
Limonene	0.02%
Linalool	0.02%
Methyl Heptanoate	0.12%
Methyl Laurate	0.03%
Methyl Octanoate	0.00%
Methyl thiohexanoate	0.00%
Myrcene	73.06%
Nerol	0.00%
Nerolidol 1	0.06%
Nerolidol 2	0.04%
Ocimene	0.22%
Terpinolene	0.03%
Unidentified	9.15%

Released by: 

Date: 11/19/2024

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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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