



YAKIMA QUALITY HOPS

Testing completed by:



Certificate of Analysis

CoA ID	Date of Issue	Test Date
ELD-2403	11/22/2024	11/04/2024, 11/22/2024

Sample Type	Variety	Total Oil (mL/100G)
T90 Pellet	El Dorado®	1.8
Alpha %	Beta %	HSI
12.4	5.3	0.252
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: 11/22/2024

6371 Fort Rd Toppenish, WA 98948

509-865-6422

*Results are related only to the samples tested and may or may not be representative of the lot. HSI determination by HPLC is not part of HopTechnic's ISO/IEC 17025:2017 accredited scope.



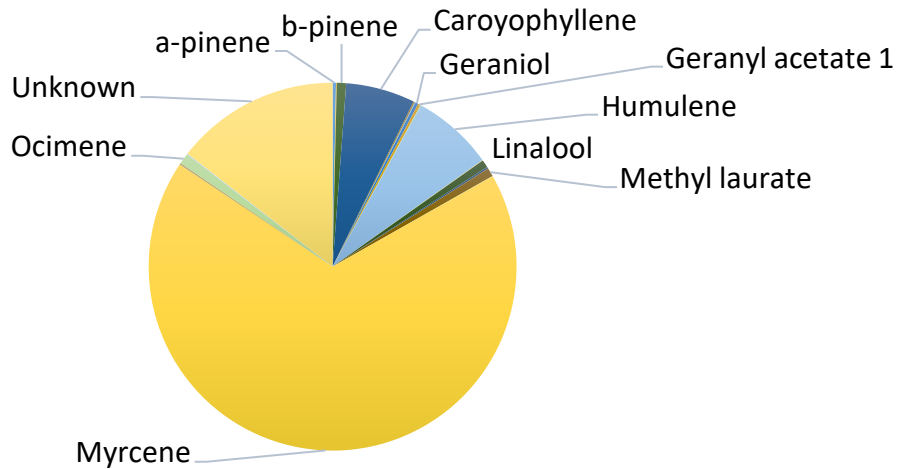
YAKIMA QUALITY HOPS

Testing completed by:



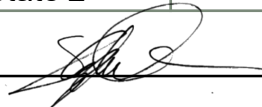
Hop Oil Composition

CoA ID	Date of Issue	Test Date
ELD-2403	11/22/2024	11/22/2024
Sample Type	Variety	Total Oil (mL/100g)
T90 Pellet	El Dorado®	1.8
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	0.30%
B-ionone	0.07%
b-pinene	0.82%
Caryophyllene	6.08%
Caryophyllene oxide	0.11%
Citral	0.00%
Citronellene	0.06%
Citronellol	0.00%
Farnesene	0.01%
Geraniol	0.26%
Geranyl acetate 1	0.23%
Geranyl acetate 2	0.06%

Aroma Compound	% of Total Oil
Humulene	7.18%
Limonene	0.04%
Linalool	0.68%
Methyl Heptanoate	0.15%
Methyl Laurate	0.76%
Methyl Octanoate	0.02%
Methyl thiohexanoate	0.00%
Myrcene	67.58%
Nerol	0.00%
Nerolidol 1	0.03%
Nerolidol 2	0.08%
Ocimene	0.95%
Terpinolene	0.07%
Unidentified	14.47%

Released by: 

Date: 11/22/2024