

AROMA QUALITY (AQ)

HOP QUALITY REPORT



Customer : Fine Bine Farms

Sample ID: 23GAL1013-01FB

Variety: Galena

Product: T-90 Pellet

Date : 10/18/2023

Certifying Officer: Zach Lilla - Lab Manager

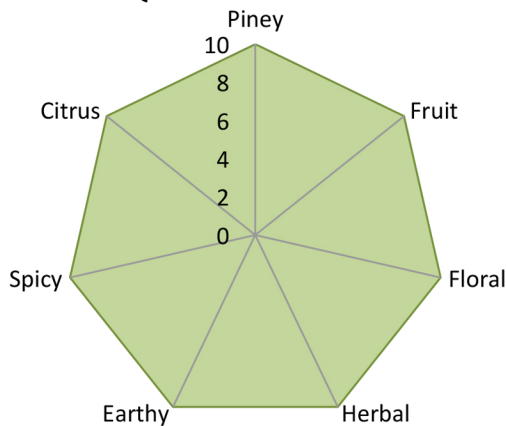
TTB Certified Chemist - Member AOAC - ASBC - BJCP

	Typical Range	
% Moisture <input type="text" value="10.9"/>	8 - 12 %	<input checked="" type="checkbox"/>
HOP QUALITY (adjusted to 10% moisture)		
Total Oil ml/100g <input type="text" value="1.45"/>	1.3 - 2.1 mL	<input checked="" type="checkbox"/>
cohumulone <input type="text" value="38.8"/>	34 - 39%	<input checked="" type="checkbox"/>
Alpha Acids <input type="text" value="11.80"/>	13 - 15%	<input type="checkbox" value="↓"/>
Beta Acids <input type="text" value="7.62"/>	7.5 - 8.5%	<input checked="" type="checkbox"/>
Myrcene <input type="text" value="NT"/>	40.00 - 50.00 %	<input type="checkbox"/>

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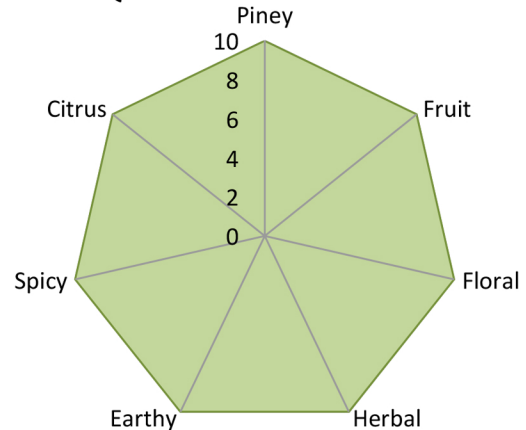
	% Area		mg/mL of Hop Oil		mg/100g of Hops (@10%H2O)	
B-Pinene	NT	0.40 - 0.70 %	NT	4 - 7	NT	5.2 - 14.7
Myrcene	NT	40.00 - 50.00 %	NT	400 - 500	NT	520 - 1050
Linalool	NT	0.10 - 0.40 %	NT	1 - 4	NT	1.3 - 8.4
Caryophyllene	NT	5.00 - 9.00 %	NT	50 - 90	NT	65 - 189
Farnesene	NT	0.01 - 1.00 %	NT	0.1 - 10	NT	0.13 - 21
Humulene	NT	11.00 - 17.00 %	NT	110 - 170	NT	143 - 357
Geraniol	NT	0.40 - 0.90 %	NT	4 - 9	NT	5.2 - 18.9

AQ vs VARIETY SPECS



Aroma Intensity= 100

AQ vs ALL HOP VARIETIES



Aroma Intensity= 100

Signed: _____

Zachary Lilla - Lab Manager - TTB Certified Chemist

AAR LAB - ADVANCED ANALYTICAL RESEARCH

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HOP QUALITY REPORT CERTIFICATE OF ANALYSIS

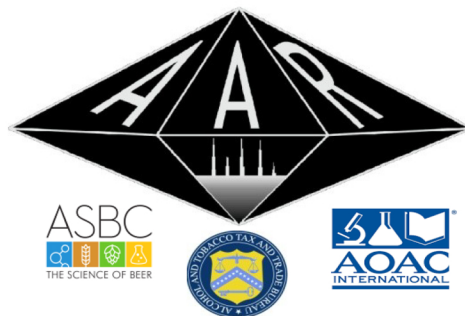
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Method			
Hops-4C	Moisture Analysis	% Moisture	10.9
		% Dry Matter	89.1
AAR	Xanthohumol by HPLC		NT mg/g
Hops-12	Hop Storage Index	HSI	0.296
Hops-13	Essential Oil by Steam Distillation	mL/100g	1.44
Hops-14	Alpha and Beta Acids by HPLC	Cohumulone	38.8 (% of Total AA)
ICE-3		% Alpha Acids	11.69
		Colupulone	65.5 (% of Total BA)
		% Beta Acids	7.55
		a/b ratio	1.55
Hops-17	Hop Essential Oil by GC-FID (as is)	% area	mg/100g
		B-Pinene	NT NT
		Myrcene	NT NT
		Linalool	NT NT
		Caryophyllene	NT NT
		Farnesene	NT NT
		Humulene	NT NT
		Geraniol	NT NT

NT=NOT TESTED

Signed: _____

Zachary Lilla - Lab Manager - TTB Certified Chemist
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