

Certificate ID: **111377**

 Received: **12/2/22**

 Scan QR Code
 for authenticity

CANNAFLOWER
**40 University Way, Unit 40
 Brattleboro, VT 05301**

 Client Sample ID: **Hawaiian Haze**

Lot Number:

 Matrix: **Flowers/Bud-Dry Flower**

Authorization: Andrew Aubin, Lab Director	Signature: 	Date: 12/23/2022
---	--	----------------------------



The data contained within this report was collected in accordance with the requirements of ISO/IEC17025:2017. I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

CN: Cannabinoid Profile & Potency [WI-10-17 & WI-10-17-01]

 Analyst: *SD*

 Test Date: *12/15/2022*

The client sample was analyzed for plant-based cannabinoids by Liquid Chromatography (LC). The collected data was compared to data collected for certified reference standards at known concentrations.

111377-CN

ID	Weight %	Concentration (mg/g)			
Δ9-THC	0.0902	0.902			
THCV	ND	ND			
CBD	0.544	5.44			
CBDV	ND	ND			
CBG	0.0633	0.633			
CBC	0.0602	0.602			
CBN	ND	ND			
THCA	0.557	5.57			
CBDA	17.4	174			
CBGA	0.349	3.49			
CBDVA	ND	ND			
Δ8-THC	ND	ND			
exo-THC	ND	ND			
Total	19.1	191	0%	Cannabinoids (wt%)	17.4%
Max THC	0.579	5.79		Limit of Quantitation (LOQ) = 0.0068 wt%	
Max CBD	15.8	158		Limit of Detection (LOD) = 0.0023 wt%	

Ratio of Total CBD to THC 27.3:1

Max THC (and Max CBD) are calculated values for total cannabinoids after heating, assuming complete decarboxylation of the acid to the neutral form. It is calculated based on the weight loss of the acid group during decarboxylation: $MAX\ THC = (0.877 \times THCA) + THC$. This calculation does not include other cannabinoid isomers (eg. D8-THC and exo-THC). ND=None detected above the limits of detection (LOD), which is one third of Limit of Quantification (LOQ). For values reported as "<LOQ", the estimated value is included in the calculated Total.

TP: Terpenes Profile [WI-10-37]

Analyst: AA

Test Date: 12/14/2022

Client sample analysis was performed using full evaporative technique (FET) headspace sample delivery and gas chromatographic (GC) compound separation or solvent extraction followed by gas chromatographic (GC) compound separation. A combination of flame ionization detection (FID) and/or mass spectrometric (MS) detection with mass spectral confirmation against the National Institute of Standards and Technology (NIST) Mass Spectral Database, Revision 2017 were used. Chromatographic and/or mass spectral data were processed by quantitatively comparing the analytical peak areas against calibration curves prepared from certified reference standards.

111377-TP

Compound	CAS	Conc. (wt%)	Conc. (ppm)	Qualitative Profile
alpha-pinene	80-56-8	0.102	1,020	
camphene	79-92-5	ND	ND	
sabinene	3387-41-5	ND	ND	
beta-pinene	127-91-3	0.0664	664	
beta-myrcene	123-35-3	0.708	7,080	
alpha-phellandrene	99-83-2	ND	ND	
delta-3-carene	13466-78-9	ND	ND	
alpha-terpinene	99-86-5	ND	ND	
p-cymene	99-87-6	ND	ND	
D-limonene	5989-27-5	0.126	1,260	
eucalyptol	470-82-6	ND	ND	
alpha-ocimene	502-99-8	ND	ND	
beta-ocimene	13877-91-3	0.0620	620	
gamma-terpinene	99-85-4	ND	ND	
terpinolene	586-62-9	0.123	1,230	
L-fenchone	7787-20-4	ND	ND	
linalool	78-70-6	0.0236	236	
isopulegol	89-79-2	ND	ND	
menthol	89-78-1	ND	ND	
geraniol	106-24-1	ND	ND	
beta-caryophyllene	87-44-5	0.0679	679	
alpha-humulene	6753-98-6	0.0446	446	
cis-nerolidol	3790-78-1	ND	ND	
trans-nerolidol	40716-66-3	ND	ND	
caryophyllene oxide	1139-30-6	ND	ND	
guaial	489-86-1	0.148	1,480	
alpha-bisabolol	23089-26-1	0.131	1,310	

Total Terpene: 1.6 wt%

* Certified reference standard not available for this compound. Concentration is estimated using the response factor from alpha-pinene. ND = None Detected. RL = Reporting Limit of 5 ppm.

END OF REPORT