

### MB1: Microbiological Contaminants [WI-10-09]

Analyst: MM Test Date.

*Test Date: 9/15/2021* 

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

### 97528-MB1

Symbol	Analysis	Results	Units	Limits*	Status
AC	Total Aerobic Bacterial Count	=1,800	CFU/g	100,000 CFU/g	PASS
CC	Total Coliform Bacterial Count	<100	CFU/g	1,000 CFU/g	PASS
EB	Total Bile Tolerant Gram Negative Count	=100	CFU/g	1,000 CFU/g	PASS
YM	Total Yeast & Mold	<100	CFU/g	10,000 CFU/g	PASS

Recommended limits established by the American Herbal Pharmacopoeia (AHP) monograph for Cannabis Inflorescence [2013], for consumable botanical products, including processed and unprocessed cannabis materials, and solvent-based extracts. Note: All recorded Microbiological tests are within the established limits.

# **END OF REPORT**



### HM: Heavy Metal Analysis [WI-10-13]

Analyst: CJS

Test Date: 8/10/2021

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

### 96426-HM

			Use Lim	its <sup>2</sup> (µg/kg)	
Metal	Conc. <sup>1</sup> ( $\mu g/kg$ )	RL	All	Ingestion	Status
Arsenic	ND	50.0	200	1,500	PASS
Cadmium	93.0	50.0	200	500	PASS
Mercury	ND	50.0	100	1,500	PASS
Lead	ND	50.0	500	1,000	PASS
	Arsenic Cadmium Mercury	ArsenicNDCadmium93.0MercuryND	ArsenicND50.0Cadmium93.050.0MercuryND50.0	Metal Conc. <sup>1</sup> (μg/kg) RL All   Arsenic ND 50.0 200   Cadmium 93.0 50.0 200   Mercury ND 50.0 100	ArsenicND50.02001,500Cadmium93.050.0200500MercuryND50.01001,500

1) ND = None detected above the indicated Reporting Limit (RL)

2) MA Dept. of Public Health: Protocol for MMJ and MIPS, Exhibit 4(a) for all products.

3) USP exposure limits based on daily oral dosing of 1g of concentrate for a 110 lb person.

MY: Mycotoxin Testing [WI-10-05]	Analyst: BMJ	Test Date: 8/6/2021

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

96426-MY					
Test ID	Date	Results	MDL	Limits	Status*
Total Aflatoxin	8/6/2021	< MDL	2 ppb	< 20 ppb	PASS
Total Ochratoxin	8/6/2021	3.9	3 ppb	< 20 ppb	PASS

PST: Pesticide Analysis [WI-10-11]	Analyst: CJR	Test Date: 8/6/2021

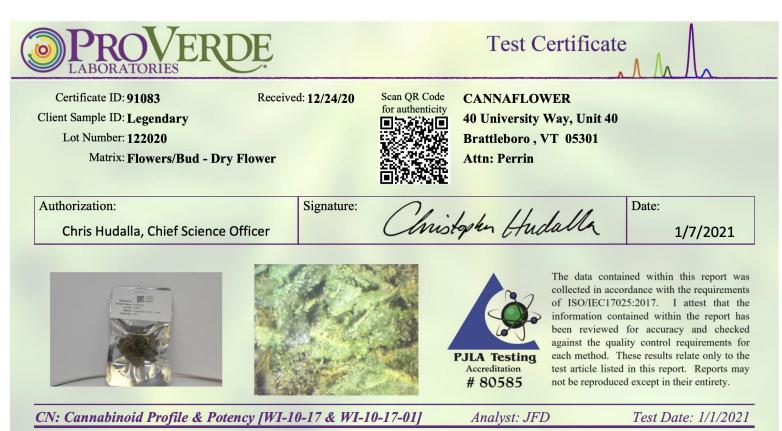
The client sample was analyzed for pesticides using Liquid Chromatography with Mass Spectrometric detection (LC/MS/MS). The method used for sample prep was based on the European method for pesticide analysis (EN 15662).

### 96426-PST

Analyte	CAS	Result	Units	LLD	Limits (ppb)	Status
Abamectin	71751-41-2	ND	ppb	0.20	10	PASS
Spinosad	168316-95-8	ND	ppb	0.10	10	PASS
Pyrethrin	8003-34-7	ND	ppb	0.10	10	PASS
Trifloxystrobin	141517-21-7	ND	ppb	0.10	100	PASS
Spirotetramat	203313-25-1	ND	ppb	0.10	100	PASS
Spiromesifen	283594-90-1	ND	ppb	0.10	100	PASS
Piperonyl butoxide	51-03-6	ND	ppb	0.10	3000	PASS
Paclobutrazol	76738-62-0	ND	ppb	0.10	10	PASS
Myclobutanil	88671-89-0	ND	ppb	0.10	100	PASS
Imidacloprid	138261-41-3	ND	ppb	0.10	5000	PASS
Imazalil	35554-44-0	ND	ppb	0.10	10	PASS
Fenoxycarb	72490-01-8	ND	ppb	0.10	10	PASS
Etoxazole	153233-91-1	ND	ppb	0.10	100	PASS
Dichlorvos	62-73-7	ND	ppb	3.00	10	PASS
Cyfluthrin	68359-37-5	ND	ppb	0.50	2000	PASS
Bifenthrin	82657-04-3	ND	ppb	0.20	3000	PASS
Bifenazate	149877-41-8	ND	ppb	0.10	100	PASS
Azoxystrobin	131860-33-8	ND	ppb	0.10	100	PASS

\* Testing limits established by the Massachusetts Department of Public Health, Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries, Exhibit 5. ND indicates "none detected" above the lower limit of detection (LLD). Analytes marked with (\*) indicate analytes for which no recovery was observed for a pre-spiked matrix sample due to matrix interference.

# **END OF REPORT**



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.

91083-CIV					
ID	Weight %	Concentration (mg/g)			
D9-THC	0.0661	0.661			
THCV	ND	ND			
CBD	0.442	4.42	•		
CBDV	ND	ND			
CBG	0.0466	0.466			
CBC	ND	ND			
CBN	ND	ND			
THCA	0.502	5.02	•		
CBDA	13.9	139			
CBGA	0.388	3.88	•		
D8-THC	ND	ND			
exo-THC	ND	ND			
Total	15.3	153	0%	Cannabinoids (wt%)	13.9%
Max THC	0.506	5.06		Limit of Quantitation (LOQ) =	0.0067 wt%
Max CBD	12.6	126		Limit of Detection (LOD) =	0.0022 wt%

### Ratio of Total CBD to THC 24.9:1

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 LOQ.

01002 CN

Analyst: AEG

*Test Date: 12/29/2020* 

### **TP: Terpenes Profile [WI-10-27]**

Client sample analysis was performed using full evaporative technique (FET) headspace sample delivery and 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.

### 91083-TP

Compound	CAS	Conc. (wt%)	Conc. (ppm)		Qualitat	tive Profile
alpha-pinene	80-56-8	0.0133	133			
camphene	79-92-5	0.0026	26.4			
sabinene*	3387-41-5	<rl< td=""><td><rl< td=""><td></td><td></td><td></td></rl<></td></rl<>	<rl< td=""><td></td><td></td><td></td></rl<>			
beta-myrcene	123-35-3	0.0064	63.5	1		
beta-pinene	127-91-3	0.0136	136	1 C C		
alpha-phellandrene	99-83-2	0.0006	5.91			
delta-3-carene	13466-78-9	ND	ND			
alpha-terpinene	99-86-5	0.0011	10.9			
alpha-ocimene	502-99-8	<rl< td=""><td><rl< td=""><td></td><td></td><td></td></rl<></td></rl<>	<rl< td=""><td></td><td></td><td></td></rl<>			
D-limonene	138-86-3	0.117	1,170			
p-cymene	99-87-6	0.0009	8.68			
cis-beta-ocimene	3338-55-4	0.0033	32.8			
eucalyptol	470-82-6	0.0131	131	1 N N		
gamma-terpinene	99-85-4	0.0024	23.6			
terpinolene	586-62-9	0.0045	45.1			
linalool	78-70-6	0.202	2,020			
L-fenchone*	7787-20-4	0.0039	39.2			
isopulegol	89-79-2	ND	ND			
menthol*	89-78-1	ND	ND			
geraniol	106-24-1	0.0006	6.48			
beta-caryophyllene	87-44-5	0.597	5,970			
alpha-humulene	6753-98-6	0.229	2,290			
cis-nerolidol	3790-78-1	ND	ND			
trans-nerolidol	40716-66-3	ND	ND			
guaiol	489-86-1	ND	ND			
caryophyllene oxide	1139-30-6	0.0140	140			
alpha-bisabolol	23089-26-1	0.0240	240			
Total Terpene: 1.3	xyt0/2		wt% 0	.00	0	0.50

### Total Terpene: 1.3 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**