PROVERDE LABORATORIES

Test Certificate

Certificate ID: **89522**
Client Sample ID: **CF014**
Lot Number:
Matrix: **Flowers/Bud - Dry Flower**

Received: **11/3/20**

Scan QR Code for authenticity

CANNAFLOWER
40 University Way, Unit 40
Brattleboro , VT 05301

Authorization:	Signature:	Date:
Chris Hudalla, Chief Science Officer	Christopher Hudalla	12/14/2020

PJLA Testing
Accreditation
80585

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.

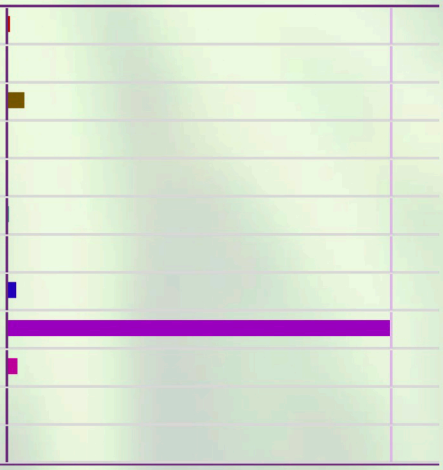
CN: Cannabinoid Profile & Potency [WI-10-17 & WI-10-17-01]

Analyst: JFD *Test Date: 12/5/2020*

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.

89522-CN

ID	Weight %	Concentration (mg/g)
D9-THC	0.143	1.43
THCV	ND	ND
CBD	0.818	8.18
CBDV	ND	ND
CBG	0.0302	0.302
CBC	0.0964	0.964
CBN	ND	ND
THCA	0.436	4.36
CBDA	18.0	180
CBGA	0.493	4.93
D8-THC	ND	ND
exo-THC	ND	ND
Total	20.0	200
Max THC	0.526	5.26
Max CBD	16.6	166



Limit of Quantitation (LOQ) = 0.0067 wt%
Limit of Detection (LOD) = 0.0022 wt%

Ratio of Total CBD to THC 31.6:1

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 x 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.

PST: Pesticide Analysis [WI-10-11]

Analyst: CJR *Test Date: 11/24/2020*

The client sample was anlayzed 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).

89522-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.

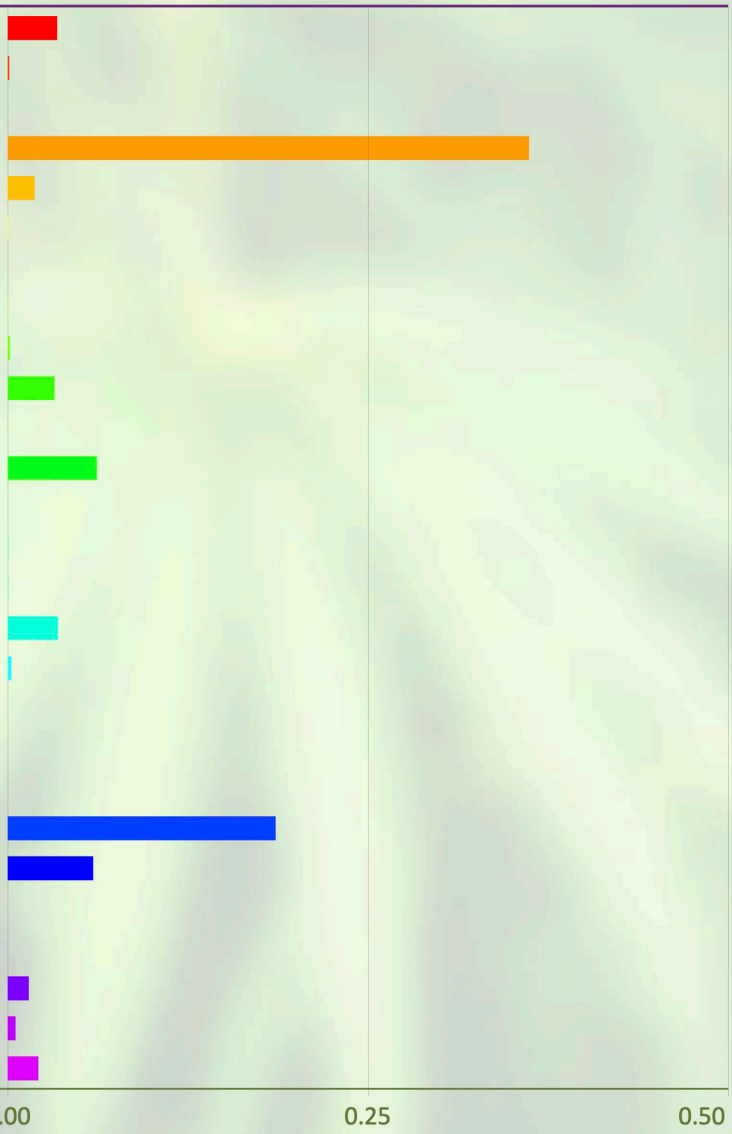
TP: Terpenes Profile [WI-10-27] *Analyst: AEG* *Test Date: 11/23/2020*

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.

89522-TP

Compound	CAS	Conc. (wt%)	Conc. (ppm)
alpha-pinene	80-56-8	0.0343	343
camphene	79-92-5	0.0011	11.4
sabinene*	3387-41-5	ND	ND
beta-myrcene	123-35-3	0.362	3,620
beta-pinene	127-91-3	0.0187	187
alpha-phellandrene	99-83-2	0.0005	5.07
delta-3-carene	13466-78-9	ND	ND
alpha-terpinene	99-86-5	<RL	<RL
alpha-ocimene	502-99-8	0.0017	16.6
D-limonene	138-86-3	0.0326	326
p-cymene	99-87-6	ND	ND
cis-beta-ocimene	3338-55-4	0.0620	620
eucalyptol	470-82-6	<RL	<RL
gamma-terpinene	99-85-4	<RL	<RL
terpinolene	586-62-9	<RL	<RL
linalool	78-70-6	0.0351	351
L-fenchone*	7787-20-4	0.0026	25.8
isopulegol	89-79-2	ND	ND
menthol*	89-78-1	ND	ND
geraniol	106-24-1	ND	ND
beta-caryophyllene	87-44-5	0.186	1,860
alpha-humulene	6753-98-6	0.0594	594
cis-nerolidol	3790-78-1	ND	ND
trans-nerolidol	40716-66-3	ND	ND
guaiol	489-86-1	0.0147	147
caryophyllene oxide	1139-30-6	0.0054	54.2
alpha-bisabolol	23089-26-1	0.0213	213

Qualitative Profile



Total Terpene: 0.8 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

MA: Moisture Analysis [WI-10-25] *Analyst: JA* *Test Date: 11/8/2020*

89522-MA

Weight loss on drying: **7.8%**

The moisture content of the client sample was evaluated based on weight loss observed on heating. The recorded weight loss is due to the loss of water and volatiles (terpenes) observed upon sample drying.

HM: Heavy Metal Analysis [WI-10-13] *Analyst: CJS* *Test Date: 12/6/2020*

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.

89522-HM

Symbol	Metal	Conc. [1] (µg/kg)	RL	Use Limits [2] (µg/kg) All	Use Limits [2] (µg/kg) Ingestion	Status
As	Arsenic	ND	50.0	200	1,500	PASS
Cd	Cadmium	ND	50.0	200	500	PASS
Hg	Mercury	ND	50.0	100	1,500	PASS
Pb	Lead	70.0	50.0	500	1,000	PASS

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.