PROVERDE LABORATORIES

Test Certificate

Certificate ID: **83711** Received: **6/29/20**

Client Sample ID: **Whole Plant Extract**

Lot Number: **NEPSSC1**

Matrix: **Concentrates/Extracts - Alcohol**

Scan QR Code for authenticity

Kingsbury Market Garden
284 Rt 100
Warren, VT 05674
Attn: Tonya Howell

Authorization:	Signature:	Date:
Chris Hudalla, Chief Science Officer	Christopher Hudalla	7/9/2020

PJLA Testing
Accreditation
80585

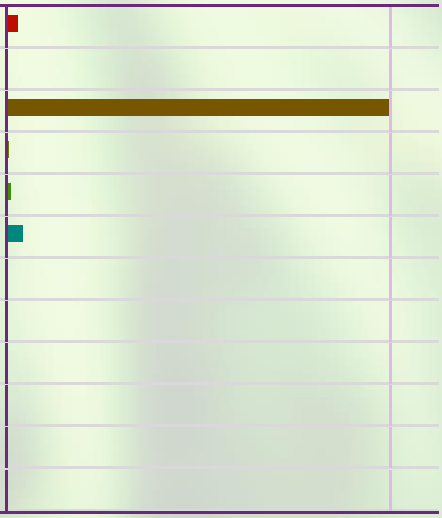
The data contained within this report was collected in accordance with the requirements of ISO/IEC17025:2017. I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the 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: RAS* *Test Date: 7/8/2020*

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.

83711-CN

ID	Weight %	Concentration (mg/g)
D9-THC	2.13	21.3
THCV	ND	ND
CBD	71.0	710
CBDV	0.536	5.36
CBG	0.914	9.14
CBC	2.99	29.9
CBN	0.0589	0.589
THCA	ND	ND
CBDA	0.259	2.59
CBGA	ND	ND
D8-THC	ND	ND
exo-THC	ND	ND
Total	77.9	779
Max THC	2.13	21.3
Max CBD	71.2	712



Ratio of Total CBD to THC 33.5:1

Limit of Quantitation (LOQ) = 0.0476 wt%

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.

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

Analyst: CJS *Test Date: 7/8/2020*

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.

83711-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	91.0	50.0	500	1,000	PASS

1) ND = None detected to Lowest Limits of Detection (LLD)
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.

MB1: Microbiological Contaminants [WI-10-09]

Analyst: MM *Test Date: 6/30/2020*

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.

83711-MB1

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

MB2: Pathogenic Bacterial Contaminants [WI-10-10]

Analyst: LabAdmin *Test Date: 7/1/2020*

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.

83711-MB2

Test ID	Analysis	Results	Units	Limits*	Status
83711-ECPT	E. coli (O157)	Negative	NA	Non Detected	PASS
83711-SPT	Salmonella	Negative	NA	Non Detected	PASS

Note: All recorded pathogenic bacteria tests passed.

MY: Mycotoxin Testing [WI-10-05]

Analyst: SRL *Test Date: 7/1/2020*

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.

83711-MY

Test ID	Date	Results	MDL	Limits	Status*
Total Aflatoxin	7/1/2020	< MDL	2 ppb	< 20 ppb	PASS
Total Ochratoxin	7/1/2020	< MDL	3 ppb	< 20 ppb	PASS

PST: Pesticide Analysis [WI-10-11] *Analyst: CJR* *Test Date: 7/6/2020*

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).

83711-PST

Analyte	CAS	Result	Units	LLD	Limits (ppb)	Status
Abamectin	71751-41-2	ND	ppb	0.20	300	PASS
Spinosad	168316-95-8	ND	ppb	0.10	3000	PASS
Pyrethrin	8003-34-7	ND	ppb	0.10	1000	PASS
Trifloxystrobin	141517-21-7	ND	ppb	0.10	30000	PASS
Spirotetramat	203313-25-1	ND	ppb	0.10	13000	PASS
Spiromesifen	283594-90-1	ND	ppb	0.10	12000	PASS
Piperonyl butoxide	51-03-6	ND	ppb	0.10	8000	PASS
Paclobutrazol	76738-62-0	ND	ppb	0.10	10	PASS
Myclobutanil	88671-89-0	ND	ppb	0.10	9000	PASS
Imidacloprid	138261-41-3	ND	ppb	0.10	3000	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	1500	PASS
Dichlorvos	62-73-7	ND	ppb	3.00	10	PASS
Cyfluthrin	68359-37-5	ND	ppb	0.50	1000	PASS
Bifenthrin	82657-04-3	ND	ppb	0.20	500	PASS
Bifenazate	149877-41-8	ND	ppb	0.10	5000	PASS
Azoxystrobin	131860-33-8	ND	ppb	0.10	40000	PASS

* Testing limits for ingestion established by the State of California: CCR, Title 16, Division 42, Chapter 5, Section 5313. 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.

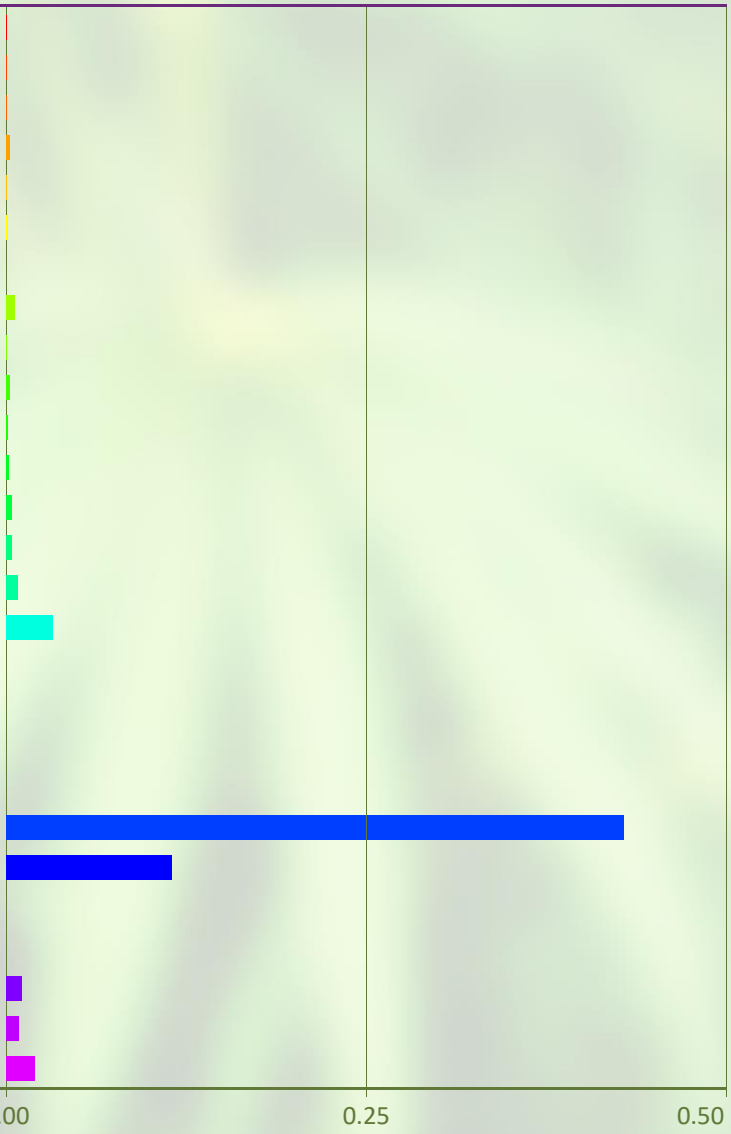
TP: Terpenes Profile [WI-10-27] *Analyst: CA* *Test Date: 7/3/2020*

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.

83711-TP

Compound	CAS	Conc. (wt%)	Conc. (ppm)
alpha-pinene	80-56-8	<RL	<RL
camphene	79-92-5	<RL	<RL
sabinene*	3387-41-5	<RL	<RL
beta-myrcene	123-35-3	0.00	26.0
beta-pinene	127-91-3	0.00	6.25
alpha-phellandrene	99-83-2	0.00	8.00
delta-3-carene	13466-78-9	ND	ND
alpha-terpinene	99-86-5	0.00	59.1
alpha-ocimene	502-99-8	<RL	<RL
D-limonene	138-86-3	0.00	27.5
p-cymene	99-87-6	0.00	13.8
cis-beta-ocimene	3338-55-4	0.00	17.2
eucalyptol	470-82-6	0.00	38.1
gamma-terpinene	99-85-4	0.00	38.6
terpinolene	586-62-9	0.00	78.6
linalool	78-70-6	0.0325	325
L-fenchone*	7787-20-4	ND	ND
isopulegol	89-79-2	ND	ND
menthol*	89-78-1	ND	ND
geraniol	106-24-1	ND	ND
beta-caryophyllene	87-44-5	0.428	4,280
alpha-humulene	6753-98-6	0.115	1,150
cis-nerolidol	3790-78-1	ND	ND
trans-nerolidol	40716-66-3	ND	ND
guaiol	489-86-1	0.0110	110
caryophyllene oxide	1139-30-6	0.00	85.7
alpha-bisabolol	23089-26-1	0.0196	196

Qualitative Profile



Total Terpene: 0.6 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