PROVERDE LABORATORIES

Test Certificate

Certificate ID: **97637** Received: **9/17/21**

Client Sample ID: **USDA Organic Broad Spectrum Rich CBD Hemp Extract**

Lot Number: **HE42**

Matrix: **Concentrates/Extracts - CO2**

Scan QR Code for authenticity

The Healing Rose Company
23 Hale Street, Unit H

Newburyport, MA 01950
Attn: Julia Jerome

Authorization:	Signature:	Date:
Chris Hudalla, Chief Science Officer	Christopher Hudalla	9/29/2021

PJLA Testing
Accreditation
80585

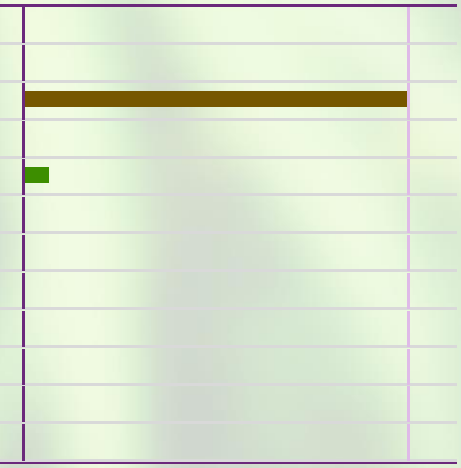
The data contained within this report was collected in accordance with the requirements of ISO/IEC17025:2017. I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the 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: AC* *Test Date: 9/22/2021*

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.

97637-CN

ID	Weight %	Concentration (mg/g)
D9-THC	ND	ND
THCV	ND	ND
CBD	91.5	915
CBDV	ND	ND
CBG	6.04	60.4
CBC	0.117	1.17
CBN	<LOQ	<LOQ
THCA	ND	ND
CBDA	ND	ND
CBGA	ND	ND
D8-THC	ND	ND
exo-THC	ND	ND
Total	97.6	976
Max THC	ND	ND
Max CBD	91.5	915



Limit of Quantitation (LOQ) = 0.0495 wt%
Limit of Detection (LOD) = 0.0165 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 Limit of Quantification (LOQ). For values reported as "<LOQ", the estimated value is included in the calculated Total.

EA: Elemental Analysis [WI-10-13] *Analyst: CJS* *Test Date: 9/22/2021*

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97637-EA

Symbol	Metal	Conc.[1](µg/kg)	RL (µg/kg)	Limits[2](µg/kg)	Status
Al	Aluminum	511	50	-	
As	Arsenic	ND	50	200	PASS
Cd	Cadmium	ND	50	200	PASS
Ca	Calcium	532	500	-	
Cr	Chromium	ND	50	300	PASS
Co	Cobalt	ND	50	300	PASS
Cu	Copper	209	50	3,000	PASS
Fe	Iron	637	50	-	
Pb	Lead	ND	50	500	PASS
Mg	Magnesium	524	50	-	
Mn	Manganese	ND	50	-	
Hg	Mercury	ND	50	100	PASS
Mo	Molybdenum	580	50	1,000	PASS
Ni	Nickel	ND	50	500	PASS
P	Phosphorus	3,730	500	-	
K	Potassium	1,840	500	-	
Se	Selenium	ND	50	-	
Ag	Silver	ND	50	700	PASS
S	Sulfur	ND	500	-	
Sn	Tin	ND	500	6,000	PASS
Zn	Zinc	59.0	50	-	

1) ND = None detected to the Method Detection Limit (MDL)
2) USP recommended maximum daily limits for inhalational drug product.

MB1: Microbiological Contaminants [WI-10-09] *Analyst: MM* *Test Date: 9/20/2021*

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.

97637-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.

MY: Mycotoxin Testing [WI-10-05]

Analyst: BMJ/CMH *Test Date: 9/23/2021*

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.

97637-MY

Test ID	Date	Results	MDL	Limits	Status*
Total Aflatoxin	9/23/2021	< MDL	2 ppb	< 20 ppb	PASS
Total Ochratoxin	9/23/2021	< MDL	3 ppb	< 20 ppb	PASS

PST: Pesticide Analysis [WI-10-11]

Analyst: CJR *Test Date: 9/17/2021*

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).

97637-PST

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

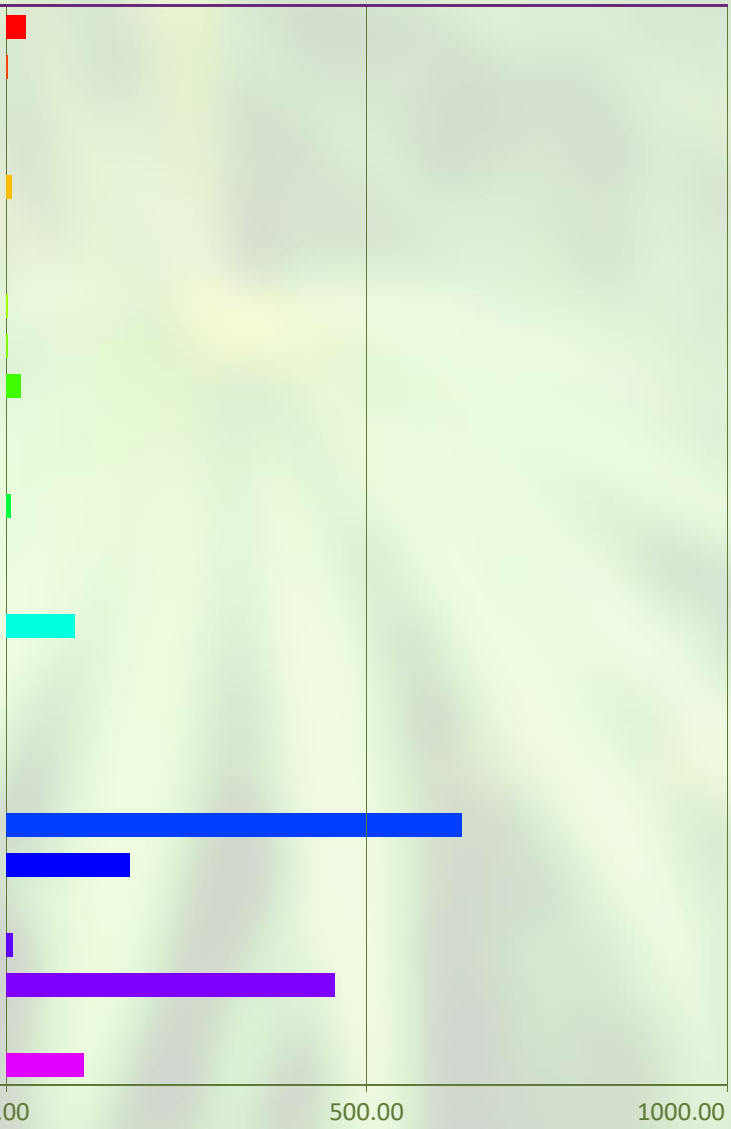
TP: Terpenes Profile [WI-10-27] *Analyst: CJS* *Test Date: 9/24/2021*

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.

97637-TP

Compound	CAS	Conc. (wt%)	Conc. (ppm)
alpha-pinene	80-56-8	0.0028	27.5
camphene	79-92-5	<RL	<RL
sabinene*	3387-41-5	ND	ND
beta-myrcene	123-35-3	ND	ND
beta-pinene	127-91-3	0.0007	7.04
alpha-phellandrene	99-83-2	ND	ND
delta-3-carene	13466-78-9	ND	ND
alpha-terpinene	99-86-5	<RL	<RL
alpha-ocimene	502-99-8	<RL	<RL
D-limonene	138-86-3	0.0020	20.1
p-cymene	99-87-6	ND	ND
cis-beta-ocimene	3338-55-4	ND	ND
eucalyptol	470-82-6	0.0006	6.17
gamma-terpinene	99-85-4	ND	ND
terpinolene	586-62-9	ND	ND
linalool	78-70-6	0.0095	94.9
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	0.0632	632
alpha-humulene	6753-98-6	0.0171	171
cis-nerolidol	3790-78-1	ND	ND
trans-nerolidol	40716-66-3	0.0010	9.60
guaiol	489-86-1	0.0455	455
caryophyllene oxide	1139-30-6	ND	ND
alpha-bisabolol	23089-26-1	0.0107	107

Qualitative Profile



Total Terpene: 0.2 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.

VC: Analysis of Volatile Organic Compounds [WI-10-28] *Analyst: CJS* *Test Date: 9/24/2021*

The client sample was analyzed by Head-Space Gas Chromatography (HS-GC). The collected data was compared to data collected for certified reference standards at known concentrations.

97637-VC

Compound	CAS	Amount [1]	Limit [2]	RL	Status
Propane	74-98-6	ND	1,000 ppm	4	PASS
Isobutane	75-28-5	ND	1,000 ppm	4	PASS
Butane	106-97-8	ND	1,000 ppm	4	PASS
Methanol	67-56-1	ND	3,000 ppm	100	PASS
Pentane	109-66-0	ND	5,000 ppm	100	PASS
Ethanol	64-17-5	ND	5,000 ppm	100	PASS
Acetone	67-64-1	ND	5,000 ppm	100	PASS
Isopropanol	67-63-0	ND	5,000 ppm	100	PASS
Acetonitrile	75-05-8	ND	410 ppm	100	PASS
Hexane	110-54-3	ND	290 ppm	100	PASS
Heptane	142-82-5	ND	5,000 ppm	100	PASS

1) ND = Not detected at a level greater than the Reporting Limit (RL).
2) In ppm, based on USP recommended limits for residual solvents, adopted by the Massachusetts Department of Public Health for cannabis concentrates and extracts on 3/31/16. Butane/Propane limits are based on limits established for state of Colorado.
(*) For ethanol, as many formulations contain flavorings based on ethanol extracts of natural products, no status has been assigned.

END OF REPORT