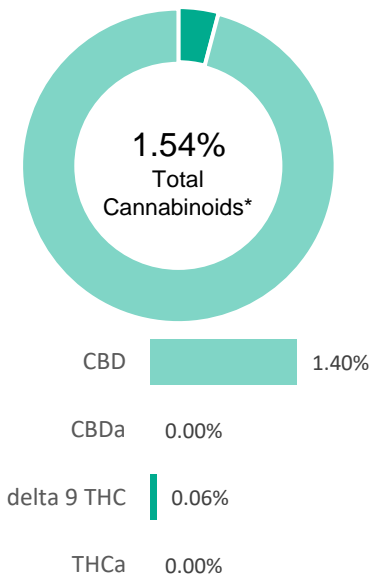


**400mg Tincture \*Full Spec Analysis**

<b>Batch ID:</b>	144320	<b>Test ID:</b>	T000115645
<b>Type:</b>	Concentrate	<b>Submitted:</b>	12/17/2020 @ 11:05 AM
<b>Test:</b>	Potency	<b>Started:</b>	12/18/2020
<b>Method:</b>	TM14	<b>Reported:</b>	12/21/2020

**CANNABINOID PROFILE**


Compound	LOD (%)	LOQ (%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.01	0.05	ND	ND
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.01	0.05	0.06	0.6
Cannabidiolic acid (CBDA)	0.02	0.05	ND	ND
Cannabidiol (CBD)	0.02	0.05	1.40	14.0
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.02	0.06	ND	ND
Cannabinolic Acid (CBNA)	0.01	0.03	ND	ND
Cannabinol (CBN)	0.00	0.01	ND	ND
Cannabigerolic acid (CBGA)	0.01	0.05	ND	ND
Cannabigerol (CBG)	0.00	0.01	0.04	0.4
Tetrahydrocannabivarinic Acid (THCVA)	0.01	0.04	ND	ND
Tetrahydrocannabivarin (THCV)	0.00	0.01	ND	ND
Cannabidivarinic Acid (CBDVA)	0.01	0.02	ND	ND
Cannabidivarin (CBDV)	0.00	0.01	ND	ND
Cannabichromenic Acid (CBCA)	0.01	0.02	ND	ND
Cannabichromene (CBC)	0.01	0.02	0.04	0.4
<b>Total Cannabinoids</b>			<b>1.54</b>	<b>15.4</b>
<b>Total Potential THC**</b>			<b>0.06</b>	<b>0.6</b>
<b>Total Potential CBD**</b>			<b>1.40</b>	<b>14.0</b>

**NOTES:**

N/A

% = % (w/w) = Percent (Weight of Analyte / Weight of Product)

\* Total Cannabinoids result reflects the absolute sum of all cannabinoids detected.

\*\* Total Potential THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step.



$$\text{Total THC} = \text{THC} + (\text{THCa} * (0.877)) \text{ and}$$

$$\text{Total CBD} = \text{CBD} + (\text{CBDa} * (0.877))$$

\*\*\*Analyte detected. Value below defined Limit of Quantitation.

ND = None Detected (Defined by Dynamic Range of the method)

**FINAL APPROVAL**

 Tyler Wiese 21-Dec-2020 5:04 PM	 Greg Zimpfer 21-Dec-2020 5:09 PM
---	---

PREPARED BY / DATE

APPROVED BY / DATE

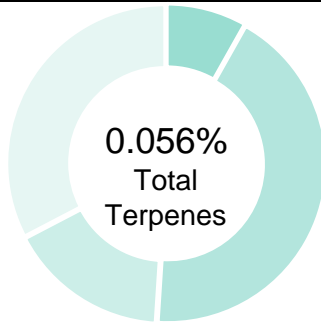
Testing results are based solely upon the sample submitted to Botanacor Laboratories, LLC, in the condition it was received. Botanacor Laboratories, LLC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of Botanacor Laboratories, LLC. ISO/IEC 17025:2005 Accredited A2LA Certificate Number 4329.02



Certificate #4329.02

**400mg Tincture \*Full Spec Analysis**

<b>Batch ID:</b>	144320	<b>Test ID:</b>	t000115648
<b>Type:</b>	Concentrate	<b>Submitted:</b>	12/17/2020 @ 11:05 AM
<b>Test:</b>	Terpenes	<b>Started:</b>	12/21/2020
<b>Method:</b>	TM22	<b>Reported:</b>	12/22/2020

**TERPENE PROFILE**


Compound	%(w/w)	mg/g
(-)-alpha-Bisabolol	0.016	0.16
Camphene	0.000	0
delta-3-Carene	0.000	0
beta-Caryophyllene	0.021	0.21
(-)-Caryophyllene Oxide	0.005	0.05
p-Cymene	0.000	0
Eucalyptol	0.000	0
Geraniol	0.000	0
alpha-Humulene	0.008	0.08
(-)-Isopulegol	0.000	0
d-Limonene	0.000	0
Linalool	0.004	0.04
beta-Myrcene	0.000	0
cis-Nerolidol	0.000	0
trans-Nerolidol	0.002	0.02
Ocimene	0.000	0
beta-Ocimene	0.000	0
alpha-Pinene	0.000	0
(-)-beta-Pinene	0.000	0
alpha-Terpinene	0.000	0
gamma-Terpinene	0.000	0
Terpinolene	0.000	0
<b>Total</b>	<b>0.056%</b>	<b>0.56</b>

**PREDOMINANT TERPENES**

alpha-Pinene	0.000%
(-)-beta-Pinene	0.000%
beta-Myrcene	0.000%
delta-3-Carene	0.000%
alpha-Terpinene	0.000%
d-Limonene	0.000%
Linalool	0.004%
beta-Caryophyllene	0.021%
alpha-Humulene	0.008%
(-)-alpha-Bisabolol	0.016%

 NOTES:  
 0

**FINAL APPROVAL**

 Michele Gagnon 22-Dec-2020 2:12 PM	 Greg Zimpfer 22-Dec-2020 4:04 PM
---	---

PREPARED BY / DATE

APPROVED BY / DATE

Testing results are based solely upon the sample submitted to Botanacor Laboratories, LLC. Botanacor Laboratories, LLC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of Botanacor Laboratories, LLC. ISO/IEC 17025:2005 Accredited A2LA Certificate Number 4329.02



Certificate #4329.02

**400mg Tincture \*Full Spec Analysis**

<b>Batch ID:</b>	144320	<b>Test ID:</b>	T000115649
<b>Type:</b>	Concentrate	<b>Submitted:</b>	12/17/2020 @ 11:05 AM
<b>Test:</b>	Pesticides	<b>Started:</b>	12/17/2020
<b>Method:</b>	TM17	<b>Reported:</b>	12/21/2020


**PESTICIDE RESIDUE**

Compound	Dynamic Range (ppb)	Result (ppb)	Compound	Dynamic Range (ppb)	Result (ppb)
Acephate	44 - 2590	ND*	Malathion	284 - 2590	ND*
Acetamiprid	47 - 2590	ND*	Metalaxyl	47 - 2590	ND*
Abamectin	>324	ND*	Methiocarb	46 - 2590	ND*
Azoxystrobin	42 - 2590	ND*	Methomyl	45 - 2590	ND*
Bifenazate	124 - 2590	ND*	MGK 264 1	181 - 2590	ND*
Boscalid	62 - 2590	ND*	MGK 264 2	120 - 2590	ND*
Carbaryl	41 - 2590	ND*	Myclobutanil	41 - 2590	ND*
Carbofuran	46 - 2590	ND*	Naled	51 - 2590	ND*
Chlorantraniliprole	43 - 2590	ND*	Oxamyl	36 - 2590	ND*
Chlorpyrifos	49 - 2590	ND*	Paclobutrazol	45 - 2590	ND*
Clofentezine	292 - 2590	ND*	Permethrin	325 - 2590	ND*
Diazinon	298 - 2590	ND*	Phosmet	41 - 2590	ND*
Dichlorvos	>281	ND*	Prophos	314 - 2590	ND*
Dimethoate	46 - 2590	ND*	Propoxur	46 - 2590	ND*
E-Fenpyroximate	283 - 2590	ND*	Pyridaben	292 - 2590	ND*
Etofenprox	42 - 2590	ND*	Spinosad A	30 - 2590	ND*
Etoxazole	291 - 2590	ND*	Spinosad D	81 - 2590	ND*
Fenoxycarb	>46	ND*	Spiromesifen	>282	ND*
Fipronil	41 - 2590	ND*	Spirotetramat	>288	ND*
Flonicamid	44 - 2590	ND*	Spiroxamine 1	21 - 2590	ND*
Fludioxonil	>341	ND*	Spiroxamine 2	25 - 2590	ND*
Hexythiazox	38 - 2590	ND*	Tebuconazole	295 - 2590	ND*
Imazalil	285 - 2590	ND*	Thiacloprid	43 - 2590	ND*
Imidacloprid	51 - 2590	ND*	Thiamethoxam	51 - 2590	ND*
Kresoxim-methyl	50 - 2590	ND*	Trifloxystrobin	43 - 2590	ND*

\* ND = None Detected (Defined by Dynamic Range of the method)

N/A

**FINAL APPROVAL**

 Tyler Wiese  
 21-Dec-2020  
 3:23 PM

PREPARED BY / DATE

 Greg Zimpfer  
 21-Dec-2020  
 3:43 PM

APPROVED BY / DATE

*Testing results are based solely upon the sample submitted to Botanacor Laboratories, LLC, in the condition it was received. Botanacor Laboratories, LLC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of Botanacor Laboratories, LLC.*

## 400mg Tincture \*Full Spec Analysis

<b>Batch ID:</b>	144320	<b>Test ID:</b>	T000115646
<b>Type:</b>	Concentrate	<b>Submitted:</b>	12/17/2020 @ 11:05 AM
<b>Test:</b>	Residual Solvents	<b>Started:</b>	12/21/2020
<b>Method:</b>	TM04	<b>Reported:</b>	12/21/2020

## RESIDUAL SOLVENTS

Solvent	Dynamic Range (ppm)	Result (ppm)
Propane	115 - 2299	*ND
Butanes (Isobutane, n-Butane)	216 - 4325	*ND
Methanol	65 - 1295	*ND
Pentane	106 - 2125	*ND
Ethanol	106 - 2124	*ND
Acetone	104 - 2076	*ND
Isopropyl Alcohol	107 - 2144	*ND
Hexane	6 - 126	*ND
Ethyl Acetate	104 - 2077	*ND
Benzene	0.2 - 4	*ND
Heptanes	105 - 2108	*ND
Toluene	19 - 378	*ND
Xylenes (m,p,o-Xylenes)	138 - 2766	*ND

\* ND = None Detected (Defined by Dynamic Range of the method)

NOTES:  
N/A

## FINAL APPROVAL

Daniel Weidensaul  
21-Dec-2020  
2:47 PMGreg Zimpfer  
21-Dec-2020  
3:14 PM

PREPARED BY / DATE

APPROVED BY / DATE

Testing results are based solely upon the sample submitted to Botanacor Laboratories, LLC, in the condition it was received. Botanacor Laboratories, LLC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of Botanacor Laboratories, LLC. ISO/IEC 17025:2005 Accredited A2LA Certificate Number 4329.02



Certificate #4329.02

## 400mg Tincture \*Full Spec Analysis


<b>Batch ID:</b>	144320	<b>Test ID:</b>	T000115650
<b>Type:</b>	Other	<b>Submitted:</b>	12/17/2020 @ 11:05 AM
<b>Test:</b>	Metals	<b>Started:</b>	12/21/2020
<b>Method:</b>	TM19	<b>Reported:</b>	12/21/2020

## HEAVY METALS


Analyte	Dynamic Range (ppm)	Result (ppm)
Arsenic	0.062 - 6.23	ND
Cadmium	0.064 - 6.39	ND
Mercury	0.065 - 6.49	ND
Lead	0.061 - 6.09	ND

\* ND = None Detected (Defined by Dynamic Range of the method)

## FINAL APPROVAL

  
Ryan Weems  
21-Dec-2020  
6:25 PM

PREPARED BY / DATE

  
Greg Zimpfer  
21-Dec-2020  
9:21 PM

APPROVED BY / DATE

Testing results are based solely upon the sample submitted to Botanacor Laboratories, LLC, in the condition it was received. Botanacor Laboratories, LLC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of Botanacor Laboratories, LLC.

## 400mg Tincture \*Full Spec Analysis

<b>Batch ID:</b>	144320	<b>Test ID:</b>	T000115647
<b>Type:</b>	Edible	<b>Submitted:</b>	12/17/2020 @ 11:05 AM
<b>Test:</b>	Microbial Contaminants	<b>Started:</b>	12/18/2020
<b>Method:</b>	TM24, TM25, TM26, TM27, TM28	<b>Reported:</b>	12/21/2020

## MICROBIAL CONTAMINANTS

Contaminant	Result (CFU/g)*
<b>Total Aerobic Count**</b>	None Detected
<b>Total Coliforms**</b>	None Detected
<b>Total Yeast and Molds**</b>	None Detected
<b>E. coli</b>	Absent
<b>E. coli (STEC)</b>	None Detected
<b>Salmonella</b>	None Detected

\* CFU/g = Colony Forming Unit per Gram


\*\* Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form.

Examples:  $10^2 = 100$  CFU  
 $10^3 = 1,000$  CFU  
 $10^4 = 10,000$  CFU  
 $10^5 = 100,000$  CFU

## NOTES:

Free from visual mold, mildew, and foreign matter  
TYM: None Detected  
Total Aerobic: None Detected  
Coliforms: None Detected

## FINAL APPROVAL

  
Sarah Henning  
21-Dec-2020  
11:51 AM  
Greg Zimpfer  
21-Dec-2020  
2:45 PM

PREPARED BY / DATE

APPROVED BY / DATE

Testing results are based solely upon the sample submitted to Botanacor Laboratories, LLC, in the condition it was received. Botanacor Laboratories, LLC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of Botanacor Laboratories, LLC. ISO/IEC 17025:2005 Accredited A2LA Certificate Number 4329.03. Testing associated with this certificate of analysis performed by an external ISO17025 accredited provider.



Certificate #4329.03