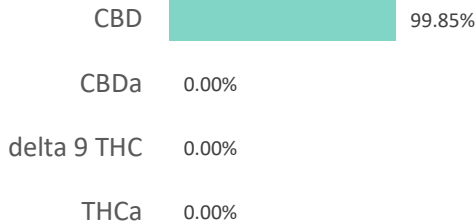
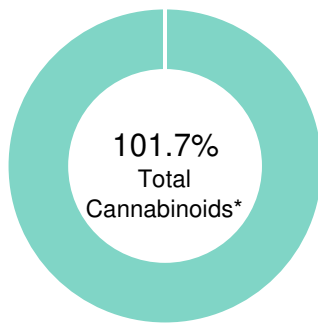


**CBD ISOLATE**

<b>Batch ID:</b>	0038-01-005	<b>Test ID:</b>	3606886.0053
<b>Reported:</b>	24-Dec-2019	<b>Method:</b>	TM14
<b>Type:</b>	Concentrate		
<b>Test:</b>	Potency		

**CANNABINOID PROFILE**


Compound	LOQ (%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.28	0.00	0.0
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.14	0.00	0.0
Cannabidiolic acid (CBDA)	0.24	0.00	0.0
Cannabidiol (CBD)	0.13	99.85	998.5
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.15	0.00	0.0
Cannabinolic Acid (CBNA)	0.38	0.00	0.0
Cannabinol (CBN)	0.17	0.00	0.0
Cannabigerolic acid (CBGA)	0.24	0.00	0.0
Cannabigerol (CBG)	0.14	1.54	15.4
Tetrahydrocannabivarinic Acid (THCVA)	0.24	0.00	0.0
Tetrahydrocannabivarin (THCV)	0.12	0.00	0.0
Cannabidivarinic Acid (CBDVA)	0.22	0.00	0.0
Cannabidivarin (CBDV)	0.12	0.31	3.1
Cannabichromenic Acid (CBCA)	0.21	0.00	0.0
Cannabichromene (CBC)	0.25	0.00	0.0
<b>Total Cannabinoids</b>		<b>101.70</b>	<b>1017.00</b>
Total Potential THC**		0.00	0.00
Total Potential CBD**		99.85	998.50

**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.

$$\text{Total THC} = \text{THC} + (\text{THCa} * (0.877)) \text{ and } \text{Total CBD} = \text{CBD} + (\text{CBDa} * (0.877))$$
**FINAL APPROVAL**


**Ryan Weems**  
 24-Dec-2019  
 3:10 PM

PREPARED BY / DATE



**David Green**  
 24-Dec-2019  
 3:47 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. ISO/IEC 17025:2005 Accredited A2LA Certificate Number 4329.02



Certificate #4329.02

**CBD ISOLATE**

<b>Batch ID:</b>	0038-01-005	<b>Test ID:</b>	8396513.004
<b>Reported:</b>	24-Dec-2019	<b>Method:</b>	TM04
<b>Type:</b>	Concentrate		
<b>Test:</b>	Residual Solvents		

**RESIDUAL SOLVENTS**

Solvent	Reportable Range (ppm)	Result (ppm)
<b>Propane</b>	100 - 2000	0
<b>Butanes</b> (Isobutane, n-Butane)	100 - 2000	0
<b>Pentane</b>	100 - 2000	207
<b>Ethanol</b>	100 - 2000	0
<b>Acetone</b>	100 - 2000	0
<b>Isopropyl Alcohol</b>	100 - 2000	0
<b>Hexane</b>	6 - 120	0
<b>Benzene</b>	0.2 - 4	0.0
<b>Heptanes</b>	100 - 2000	0
<b>Toluene</b>	18 - 360	0
<b>Xylenes</b> (m,p,o-Xylenes)	43 - 860	0

**NOTES:**

Free from visual mold, mildew, and foreign matter.

**FINAL APPROVAL**

 Ryan Weems 24-Dec-2019 2:35 PM	 David Green 24-Dec-2019 4:13 PM
---	--

PREPARED BY / DATE

APPROVED BY / DATE

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Certificate #4329.02

## CBD ISOLATE

<b>Batch ID:</b>	0038-01-005	<b>Test ID:</b>	1414152.011
<b>Reported:</b>	26-Dec-2019	<b>Method:</b>	Concentrate - Test Methods: TM05, TM06
<b>Type:</b>	Concentrate		
<b>Test:</b>	Microbial Contaminants		

## 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><i>E. coli</i></b>	None Detected
<b><i>Salmonella</i></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  
26-Dec-2019  
1:24 PM

  
Mike Branvold  
26-Dec-2019  
5:49 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



Certificate #4329.03

**CBD ISOLATE**

<b>Batch ID:</b>	0038-01-005	<b>Test ID:</b>	1939710.008
<b>Reported:</b>	27-Dec-2019	<b>Method:</b>	TM17
<b>Type:</b>	Concentrate		
<b>Test:</b>	Pesticides		


**PESTICIDE RESIDUE**


Compound	Dynamic Range (ppb)	Result (ppb)	Compound	Dynamic Range (ppb)	Result (ppb)
Acephate	59 - 2730	ND*	Malathion	59 - 2730	ND*
Acetamiprid	59 - 2730	ND*	Metalaxyl	354 - 2730	ND*
Avermectin	354 - 2730	ND*	Methiocarb	59 - 2730	ND*
Azoxystrobin	59 - 2730	ND*	Methomyl	59 - 2730	ND*
Bifenazate	59 - 2730	ND*	MGK 264 1	59 - 2730	ND*
Boscalid	354 - 2730	ND*	MGK 264 2	354 - 2730	ND*
Carbaryl	59 - 2730	ND*	Myclobutanil	354 - 2730	ND*
Carbofuran	59 - 2730	ND*	Naled	354 - 2730	ND*
Chlorantraniliprole	59 - 2730	ND*	Oxamyl	59 - 2730	ND*
Chlorpyrifos	354 - 2730	ND*	Paclobutrazol	59 - 2730	ND*
Clofentezine	59 - 2730	ND*	Permethrin	354 - 2730	ND*
Diazinon	59 - 2730	ND*	Phosmet	59 - 2730	ND*
Dichlorvos	354 - 2730	ND*	Prophos	354 - 2730	ND*
Dimethoate	59 - 2730	ND*	Propoxur	354 - 2730	ND*
E-Fenproximate	354 - 2730	ND*	Pyridaben	354 - 2730	ND*
Etofenprox	354 - 2730	ND*	Spinosad A	59 - 2730	ND*
Etoxazole	354 - 2730	ND*	Spinosad D	354 - 2730	ND*
Fenoxycarb	59 - 2730	ND*	Spiromesifen	59 - 2730	ND*
Fipronil	354 - 2730	ND*	Spirotetramat	354 - 2730	ND*
Flonicamid	59 - 2730	ND*	Spiroxamine 1	59 - 2730	ND*
Fludioxonil	354 - 2730	ND*	Spiroxamine 2	59 - 2730	ND*
Hexythiazox	354 - 2730	ND*	Tebuconazole	59 - 2730	ND*
Imazalil	354 - 2730	ND*	Thiacloprid	59 - 2730	ND*
Imidacloprid	59 - 2730	ND*	Thiamethoxam	59 - 2730	ND*
Kresoxim-methyl	59 - 2730	ND*	Trifloxystrobin	354 - 2730	ND*

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

N/A

**FINAL APPROVAL**

  
 Sam Smith  
 27-Dec-2019  
 6:39 AM  
 PREPARED BY / DATE

  
 Greg Zimpfer  
 27-Dec-2019  
 8:39 AM  
 APPROVED BY / DATE

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## CBD ISOLATE

<b>Batch ID:</b>	0038-01-005	<b>Test ID:</b>	T000046534
<b>Reported:</b>	9-Jan-2020	<b>Method:</b>	Arsenic = Arsenic EPA 6020A (mod), Cadmium = Cadmium EPA 6020A (mod), Lead = Lead EPA 6020A (mod), Mercury = Mercury EPA 6020A (mod)
<b>Type:</b>	Other		
<b>Test:</b>	Metals		


## HEAVY METALS

Compound	Reporting Limit (ppm)	Result (ppm)
Arsenic	0.05	<0.05
Cadmium	0.05	<0.05
Lead	0.05	<0.05
Mercury	0.05	<0.05

## FINAL APPROVAL

 Sam Smith  
9-Jan-2020  
6:05 AM

PREPARED BY / DATE

 Greg Zimpfer  
9-Jan-2020  
8:16 AM

APPROVED BY / DATE

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