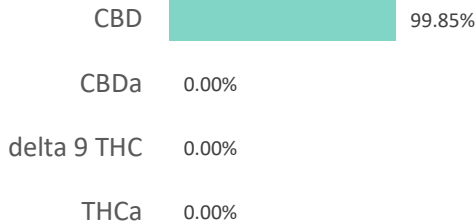
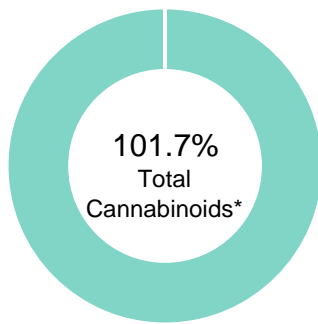


CBD ISOLATE

Batch ID:	0038-01-005	Test ID:	3606886.0053
Reported:	24-Dec-2019	Method:	TM14
Type:	Concentrate		
Test:	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
Total Cannabinoids		101.70	1017.00
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.

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


Ryan Weems
 24-Dec-2019
 3:10 PM

PREPARED BY / DATE



David Green
 24-Dec-2019
 3:47 PM

APPROVED BY / DATE

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CBD ISOLATE

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

Batch ID:	0038-01-005	Test ID:	1939710.008
Reported:	27-Dec-2019	Method:	TM17
Type:	Concentrate		
Test:	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-Fenpyroximate	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

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

MICROBIAL CONTAMINANTS

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

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Certificate #4329.03

CBD ISOLATE

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


RESIDUAL SOLVENTS

Solvent	Reportable Range (ppm)	Result (ppm)
Propane	100 - 2000	0
Butanes (Isobutane, n-Butane)	100 - 2000	0
Pentane	100 - 2000	207
Ethanol	100 - 2000	0
Acetone	100 - 2000	0
Isopropyl Alcohol	100 - 2000	0
Hexane	6 - 120	0
Benzene	0.2 - 4	0.0
Heptanes	100 - 2000	0
Toluene	18 - 360	0
Xylenes (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

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