

**HEMP DISTILLATE FULL PANEL**

<b>Batch ID:</b>	HC0101	<b>Test ID:</b>	3006208.0024
<b>Reported:</b>	17-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	56 - 2600	ND*	Malathion	56 - 2600	ND*
Acetamiprid	56 - 2600	ND*	Metalaxyl	337 - 2600	ND*
Avermectin	337 - 2600	ND*	Methiocarb	56 - 2600	ND*
Azoxystrobin	56 - 2600	ND*	Methomyl	56 - 2600	ND*
Bifenazate	56 - 2600	ND*	MGK 264 1	56 - 2600	ND*
Boscalid	337 - 2600	ND*	MGK 264 2	337 - 2600	ND*
Carbaryl	56 - 2600	ND*	Myclobutanil	337 - 2600	ND*
Carbofuran	56 - 2600	ND*	Naled	337 - 2600	ND*
Chlorantraniliprole	56 - 2600	ND*	Oxamyl	56 - 2600	ND*
Chlorpyrifos	337 - 2600	ND*	Paclobutrazol	56 - 2600	ND*
Clofentezine	56 - 2600	ND*	Permethrin	337 - 2600	ND*
Diazinon	56 - 2600	ND*	Phosmet	56 - 2600	ND*
Dichlorvos	337 - 2600	ND*	Prophos	337 - 2600	ND*
Dimethoate	56 - 2600	ND*	Propoxur	337 - 2600	ND*
E-Fenpyroximate	337 - 2600	ND*	Pyridaben	337 - 2600	ND*
Etofenprox	337 - 2600	ND*	Spinosad A	56 - 2600	ND*
Etoxazole	337 - 2600	ND*	Spinosad D	337 - 2600	ND*
Fenoxycarb	56 - 2600	ND*	Spiromesifen	56 - 2600	ND*
Fipronil	337 - 2600	ND*	Spirotetramat	337 - 2600	ND*
Flonicamid	56 - 2600	ND*	Spiroxamine 1	56 - 2600	ND*
Fludioxonil	337 - 2600	ND*	Spiroxamine 2	56 - 2600	ND*
Hexythiazox	337 - 2600	ND*	Tebuconazole	56 - 2600	ND*
Imazalil	337 - 2600	ND*	Thiacloprid	56 - 2600	ND*
Imidacloprid	56 - 2600	ND*	Thiamethoxam	56 - 2600	ND*
Kresoxim-methyl	56 - 2600	ND*	Trifloxystrobin	337 - 2600	ND*

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

N/A

**FINAL APPROVAL**

  
 Sam Smith  
 17-Dec-2019  
 2:34 PM  
 PREPARED BY / DATE

  
 Greg Zimpfer  
 17-Dec-2019  
 3:00 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.

## HEMP DISTILLATE FULL PANEL

<b>Batch ID:</b>	HC0101	<b>Test ID:</b>	T000040565
<b>Reported:</b>	16-Dec-2019	<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	0.11
Cadmium	0.05	<0.05
Lead	0.05	<0.05
Mercury	0.05	<0.05

## FINAL APPROVAL



Greg Zimpfer  
16-Dec-2019  
8:52 AM

PREPARED BY / DATE



David Green  
16-Dec-2019  
11:48 AM

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.


## HEMP DISTILLATE FULL PANEL

<b>Batch ID:</b>	HC0101	<b>Test ID:</b>	T000040564
<b>Reported:</b>	16-Dec-2019	<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	0.11
Cadmium	0.05	<0.05
Lead	0.05	<0.05
Mercury	0.05	<0.05

## FINAL APPROVAL



Greg Zimpfer  
16-Dec-2019  
8:52 AM

PREPARED BY / DATE



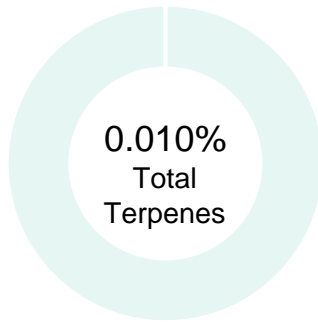
David Green  
16-Dec-2019  
11:48 AM

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.

**HEMP DISTILLATE FULL PANEL**

<b>Batch ID:</b>	HC0101	<b>Test ID:</b>	8283491.0026
<b>Reported:</b>	15-Dec-2019	<b>Method:</b>	TM10
<b>Type:</b>	Concentrate		
<b>Test:</b>	Terpenes		

**TERPENE PROFILE**




Compound	%(w/w)	mg/g
(-)-alpha-Bisabolol	0.010	0.1
Camphene	0.000	0
delta-3-Carene	0.000	0
beta-Caryophyllene	0.000	0
(-)-Caryophyllene Oxide	0.000	0
p-Cymene	0.000	0
Eucalyptol	0.000	0
Geraniol	0.000	0
alpha-Humulene	0.000	0
(-)-Isopulegol	0.000	0
d-Limonene	0.000	0
Linalool	0.000	0
beta-Myrcene	0.000	0
cis-Nerolidol	0.000	0
trans-Nerolidol	0.000	0
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>0.010%</b>	<b>0.10</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	0.000%
beta-Caryophyllene	0.000%
alpha-Humulene	0.000%
(-)-alpha-Bisabolol	0.010%

 NOTES:  
 0

**FINAL APPROVAL**

 Daniel Weidensaul 14-Dec-2019 2:59 PM	 Mike Branvold 15-Dec-2019 8:06 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

**HEMP DISTILLATE FULL PANEL**


<b>Batch ID:</b>	HC0101	<b>Test ID:</b>	1838636.001
<b>Reported:</b>	15-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>E. coli</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**  
Mara Miller  
15-Dec-2019  
5:51 PM  
Mike Branvold  
15-Dec-2019  
7:58 PM

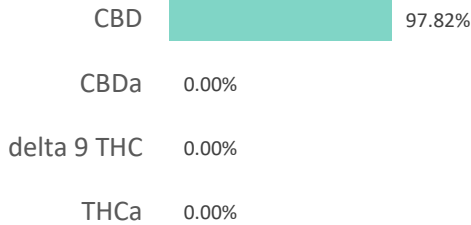
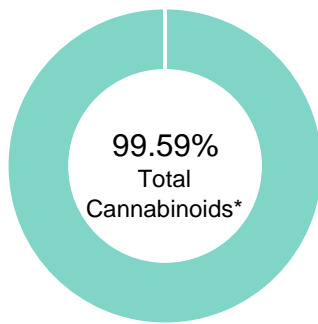
PREPARED BY / DATE

APPROVED BY / DATE

Testing results are based solely upon the sample submitted to Botanacor Services, LLC, in the condition it was received. Botanacor Services, 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 Services, LLC.

**BROAD SPECTRUM THC FREE**

<b>Batch ID:</b>	CC-925-2275	<b>Test ID:</b>	3804502.002
<b>Reported:</b>	9-Oct-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)	0.20	0.00	0.0
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.10	0.00	0.0
Cannabidiolic acid (CBDA)	0.28	0.00	0.0
Cannabidiol (CBD)	0.16	97.82	978.2
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.11	0.00	0.0
Cannabinolic Acid (CBNA)	0.27	0.00	0.0
Cannabinol (CBN)	0.12	0.45	4.5
Cannabigerolic acid (CBGA)	0.17	0.00	0.0
Cannabigerol (CBG)	0.10	0.13	1.3
Tetrahydrocannabivarinic Acid (THCVA)	0.17	0.00	0.0
Tetrahydrocannabivarin (THCV)	0.09	0.00	0.0
Cannabidivarinic Acid (CBDVA)	0.26	0.00	0.0
Cannabidivarin (CBDV)	0.14	0.39	3.9
Cannabichromenic Acid (CBCA)	0.15	0.00	0.0
Cannabichromene (CBC)	0.18	0.80	8.0
<b>Total Cannabinoids</b>		<b>99.59</b>	<b>995.90</b>
Total Potential THC**		0.00	0.00
Total Potential CBD**		97.82	978.20


**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**  
 9-Oct-2019  
 9:39 AM

PREPARED BY / DATE



**David Green**  
 9-Oct-2019  
 12:22 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

