



# botanacor

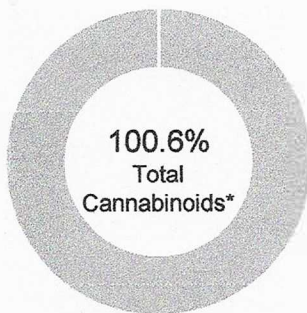
## CERTIFICATE OF ANALYSIS

prepared for: Panacea Life Sciences  
16194 W45th Drive  
GOLDEN, CO 80401

RM-0053

Batch ID:	Isolate	Test ID:	1980085.0015
Reported:	9-Oct-2019	Method:	TM14
Type:	Concentrate		
Test:	Potency		

### CANNABINOID PROFILE



CBD 100.15%

CBDa 0.00%

delta 9 THC 0.00%

THCa 0.00%

Compound	LOQ (%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.22	0.00	0.0
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.11	0.00	0.0
Cannabidiolic acid (CBDA)	0.35	0.00	0.0
Cannabidiol (CBD)	0.19	100.15	1001.5
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.12	0.00	0.0
Cannabinolic Acid (CBNA)	0.31	0.00	0.0
Cannabinol (CBN)	0.14	0.00	0.0
Cannabigerolic acid (CBGA)	0.20	0.00	0.0
Cannabigerol (CBG)	0.11	0.00	0.0
Tetrahydrocannabivarinic Acid (THCVA)	0.19	0.00	0.0
Tetrahydrocannabivarin (THCV)	0.10	0.00	0.0
Cannabidivarinic Acid (CBDVA)	0.32	0.00	0.0
Cannabidivarin (CBDV)	0.18	0.45	4.5
Cannabichromenic Acid (CBCA)	0.17	0.00	0.0
Cannabichromene (CBC)	0.20	0.00	0.0
<b>Total Cannabinoids</b>		<b>100.60</b>	<b>1006.00</b>
<b>Total Potential THC**</b>		<b>0.00</b>	<b>0.00</b>
<b>Total Potential CBD**</b>		<b>100.15</b>	<b>1001.50</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.

Total THC = THC + (THCa \* (0.877)) and Total CBD = CBD + (CBDa \* (0.877))

### FINAL APPROVAL

Tyler Wiese  
9-Oct-2019  
4:57 PM  
PREPARED BY / DATE

Greg Zimpfer  
9-Oct-2019  
5:42 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 RM-0053

<b>Batch ID:</b>	Isolate	<b>Test ID:</b>	8976865.007
<b>Reported:</b>	24-Oct-2019	<b>Method:</b>	TM04
<b>Type:</b>	Concentrate		
<b>Test:</b>	Residual Solvents		

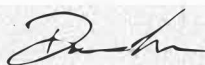
## RESIDUAL SOLVENTS

Solvent	Reportable Range (ppm)	Result (ppm)
Propane	100 - 2000	0
Butanes (Isobutane, n-Butane)	100 - 2000	0
Pentane	100 - 2000	0
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

Alex Smith  
24-Oct-2019  
3:09 PMDavid Green  
24-Oct-2019  
3:31 PM

PREPARED BY / DATE

APPROVED BY / DATE

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Certificate #4329.02

## CBD Isolate RM-0053

Batch ID:	K4996	Test ID:	5577146.012
Reported:	16-Dec-2019	Method:	Concentrate - Test Methods: TM05, TM06
Type:	Concentrate		
Test:	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

  
Mara Miller  
16-Dec-2019  
5:32 PM  
David Green  
16-Dec-2019  
6:23 PM

PREPARED BY / DATE

APPROVED BY / DATE

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# Gobi Labs

## Analytical Report

**Manifest:** CBD Isolate RM-0053  
**METRC ID:** 1A4000712680D2B000000738  
**Sample Name:** Isolate  
**Sample Type:** Concentrate  
**License:** 403H-73547  
**Licensee:** Panacea Life Sciences  
**Facility Address:**

**Test Performed:** Chemistry Lab  
**Intended Use:** Inhaled or Audited Product  
**Report No:** MT-3824406-V1  
**Receive Date:** 2019-11-14  
**Test Date:** 2019-11-15  
**Report Date:** 2019-11-21  
**Sample Condition:** Good  
**Method Reference:** GA-OP-17


### Scope

Arsenic, Cadmium, Lead and Mercury were determined by an Inductive Coupled Plasma Mass Spectrometer (ICP-MS) using an in-house developed method.

Metals	Regulatory Limits (ppm)	Parts Per Million (ppm)
Arsenic	< 0.2 ppm	ND
Cadmium	< 0.2 ppm	ND
Lead	< 0.5 ppm	ND
Mercury	< 0.1 ppm	ND

ND - not detected; T - trace; ULOQ - upper limit of quantitation

Laboratory Comments:

  
Dave Wells - Laboratory Manager

2019-11-21  
Date

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Gobi Analytical  
● 3924 Youngfield St. ●  
● Wheat Ridge CO 80033 ●  
● (303) 456-2040 ●





# Gobi Labs

## Pesticide Residues Report

**Manifest:** CBD Isolate RM-0053  
**METRC ID:** 1A4000712680D2B00000073  
**Sample Name:** RM-0053  
**Sample Type:** CBD Isolate  
**License:**  
**Licensee:** Panacea Life Sciences  
**Facility Address:**

**Test Performed:** Chemistry Lab  
**Report No:** PE-3824406-V1  
**Receive Date:** 2019-11-14  
**Test Date:** 2019-11-15  
**Report Date:** 2019-11-18  
**Sample Condition:** Good  
**Method Reference:** GA-OP-11

### Scope

The content of 13 pesticides were quantified using liquid chromatography coupled to multiple mass spectrometry (LC-MS2) equipped with electrospray ionization (ESI) in positive mode after sample extraction and clean up using QuEChERS methodology based on AOAC 2007 and EN 15662 standard procedures certified by CDPHE. Identification was based on the retention time of each compound and the product mass generated using single reaction monitoring (SRM), and quantitation was determined using external standard calibration.

Pesticides	Regulatory Limit (ppm)	Sample Reporting Limit (ppm)*	Parts Per Million (ppm)**
Abamectin	0.070	0.070	ND
Azoxystrobin	0.020	0.005	ND
Bifenazate	0.020	0.005	ND
Etoxazole	0.010	0.005	ND
Imazalil	0.040	0.005	ND
Imidacloprid	0.020	0.005	ND
Malathion	0.050	0.005	ND
Myclobutanil	0.040	0.010	ND
Permethrin	0.040	0.020	ND
Spinosad	0.060	0.010	ND
Spiromesifen	0.030	0.005	ND
Spirotetramat	0.020	0.010	ND
Tebuconazole	0.010	0.010	ND

\*or Lower Limit of Quantitation (LLOQ). \*\*T (Trace) = sample result is between LLOQ and Method Detection Limit (MDL). ND (Not Detected) = sample result is below MDL. >HLOQ = sample result is above Higher LOQ.

Laboratory Comments:

Dave Wells - Laboratory Manager

2019-11-18

Date

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