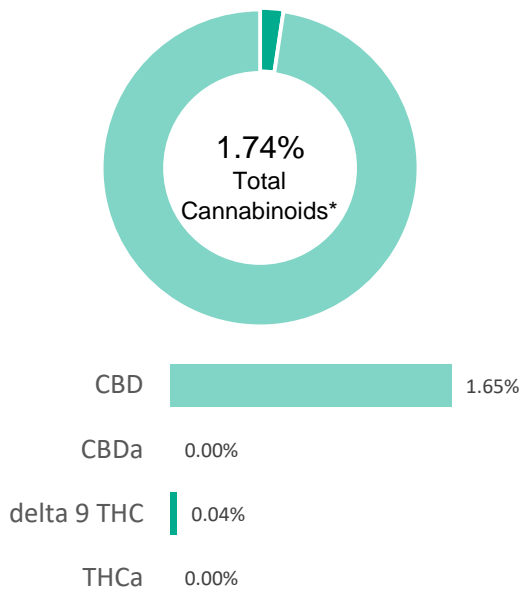


1500mg Tincture-Batch TGM15003172

<b>Batch ID:</b>	TGM15003172	<b>Test ID:</b>	7066892.0042
<b>Reported:</b>	11-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)	0.02	0.00	0.0
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.01	0.04	0.4
Cannabidiolic acid (CBDA)	0.02	0.00	0.0
Cannabidiol (CBD)	0.01	1.65	16.5
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.01	0.00	0.0
Cannabinolic Acid (CBNA)	0.02	0.00	0.0
Cannabinol (CBN)	0.01	0.00	0.0
Cannabigerolic acid (CBGA)	0.01	0.00	0.0
Cannabigerol (CBG)	0.01	0.02	0.2
Tetrahydrocannabivarinic Acid (THCVA)	0.01	0.00	0.0
Tetrahydrocannabivarin (THCV)	0.01	0.00	0.0
Cannabidivarinic Acid (CBDVA)	0.02	0.00	0.0
Cannabidivarin (CBDV)	0.01	0.00	0.0
Cannabichromenic Acid (CBCA)	0.01	0.00	0.0
Cannabichromene (CBC)	0.01	0.03	0.3
<b>Total Cannabinoids</b>		<b>1.74</b>	<b>17.40</b>
<b>Total Potential THC**</b>		<b>0.04</b>	<b>0.40</b>
<b>Total Potential CBD**</b>		<b>1.65</b>	<b>16.50</b>

% = % (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))


### NOTES:

Certificate reissued due to typographical error.

## FINAL APPROVAL

  
**Alex Smith**  
11-Oct-2019  
3:43 PM

PREPARED BY / DATE

  
**David Green**  
11-Oct-2019  
3:50 PM

APPROVED BY / DATE

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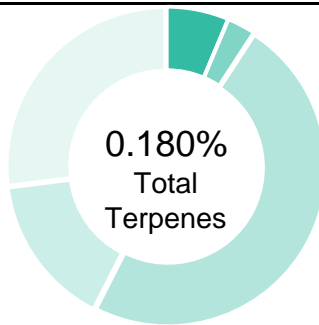
Certificate #4329.02

prepared for: RAD EXTRACTION  
860 COMMERCIAL LANE  
PALMER LAKE, CO 80133

1500mg Tincture-Batch TGM15003172

Batch ID:	TGM15003172	Test ID:	2662061.0038
Reported:	9-Dec-2019	Method:	TM10
Type:	Concentrate		
Test:	Terpenes		

## TERPENE PROFILE



## PREDOMINANT TERPENES

alpha-Pinene	0.000%
(-)-beta-Pinene	0.000%
beta-Myrcene	0.011%
delta-3-Carene	0.000%
alpha-Terpinene	0.000%
d-Limonene	0.005%
Linalool	0.000%
beta-Caryophyllene	0.084%
alpha-Humulene	0.027%
(-)-alpha-Bisabolol	0.047%

Compound	%(w/w)	mg/g
(-)-alpha-Bisabolol	0.047	0.47
Camphene	0.000	0
delta-3-Carene	0.000	0
beta-Caryophyllene	0.084	0.84
(-)-Caryophyllene Oxide	0.000	0
p-Cymene	0.000	0
Eucalyptol	0.006	0.06
Geraniol	0.000	0
alpha-Humulene	0.027	0.27
(-)-Isopulegol	0.000	0
d-Limonene	0.005	0.05
Linalool	0.000	0
beta-Myrcene	0.011	0.11
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>0.180%</b>	<b>1.80</b>

## NOTES:

0

## FINAL APPROVAL

Daniel Weidensaul  
9-Dec-2019  
1:47 PMDavid Green  
9-Dec-2019  
2:13 PM

PREPARED BY / DATE

APPROVED BY / DATE

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**1500mg Tincture-Batch TGM15003172**

<b>Batch ID:</b>	TGM15003172	<b>Test ID:</b>	1892194.0021
<b>Reported:</b>	4-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	48 - 2238	ND*	Malathion	48 - 2238	ND*
Acetamiprid	48 - 2238	ND*	Metalaxyl	290 - 2238	ND*
Avermectin	290 - 2238	ND*	Methiocarb	48 - 2238	ND*
Azoxystrobin	48 - 2238	ND*	Methomyl	48 - 2238	ND*
Bifenazate	48 - 2238	ND*	MGK 264 1	48 - 2238	ND*
Boscalid	290 - 2238	ND*	MGK 264 2	290 - 2238	ND*
Carbaryl	48 - 2238	ND*	Myclobutanil	290 - 2238	ND*
Carbofuran	48 - 2238	ND*	Naled	290 - 2238	ND*
Chlorantraniliprole	48 - 2238	ND*	Oxamyl	48 - 2238	ND*
Chlorpyrifos	290 - 2238	ND*	Paclobutrazol	48 - 2238	ND*
Clofentezine	48 - 2238	ND*	Permethrin	290 - 2238	ND*
Diazinon	48 - 2238	ND*	Phosmet	48 - 2238	ND*
Dichlorvos	290 - 2238	ND*	Prophos	290 - 2238	ND*
Dimethoate	48 - 2238	ND*	Propoxur	290 - 2238	ND*
E-Fenpyroximate	290 - 2238	ND*	Pyridaben	290 - 2238	ND*
Etofenprox	290 - 2238	ND*	Spinosad A	48 - 2238	ND*
Etoxazole	290 - 2238	ND*	Spinosad D	290 - 2238	ND*
Fenoxycarb	48 - 2238	ND*	Spiromesifen	48 - 2238	ND*
Fipronil	290 - 2238	ND*	Spirotetramat	290 - 2238	ND*
Flonicamid	48 - 2238	ND*	Spiroxamine 1	48 - 2238	ND*
Fludioxonil	290 - 2238	ND*	Spiroxamine 2	48 - 2238	ND*
Hexythiazox	290 - 2238	ND*	Tebuconazole	48 - 2238	ND*
Imazalil	290 - 2238	ND*	Thiacloprid	48 - 2238	ND*
Imidacloprid	48 - 2238	ND*	Thiamethoxam	48 - 2238	ND*
Kresoxim-methyl	48 - 2238	ND*	Trifloxystrobin	290 - 2238	ND*

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

N/A

**FINAL APPROVAL**

  
**Sam Smith**  
 4-Dec-2019  
 6:32 AM

PREPARED BY / DATE

  
**David Green**  
 4-Dec-2019  
 8:47 AM

APPROVED BY / DATE

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1500mg Tincture-Batch TGM15003172

<b>Batch ID:</b>	TGM15003172	<b>Test ID:</b>	8825391.022
<b>Reported:</b>	30-Nov-2019	<b>Method:</b>	Edible - Test Methods: TM05, TM06
<b>Type:</b>	Edible		
<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



Robert Belfon  
30-Nov-2019  
6:10 PM

PREPARED BY / DATE



Mike Branvold  
30-Nov-2019  
8:23 PM

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.

1500mg Tincture-Batch TGM15003172

Batch ID:	TGM15003172	Test ID:	1776426.002
Reported:	5-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	0
Ethanol	100 - 2000	115
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

  
Karen Winternheimer  
5-Dec-2019  
2:54 PM  
Greg Zimpfer  
5-Dec-2019  
3:53 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

prepared for: RAD EXTRACTS  
860 COMMERCIAL LANE  
PALMER LAKE, CO 80133


1500mg Tincture-Batch TGM15003172


<b>Batch ID:</b>	TGM15003172	<b>Test ID:</b>	T000039314
<b>Reported:</b>	12-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	<0.05
Cadmium	0.05	<0.05
Lead	0.05	<0.05
Mercury	0.05	<0.05

## FINAL APPROVAL

 Alex Smith  
12-Dec-2019  
7:11 AM  
PREPARED BY / DATE

 Greg Zimpfer  
12-Dec-2019  
8:24 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.