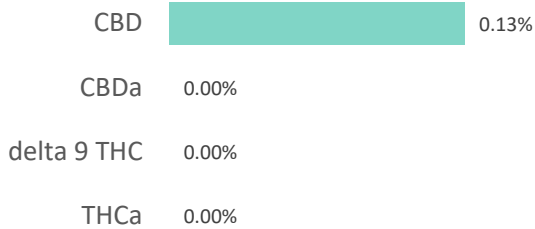
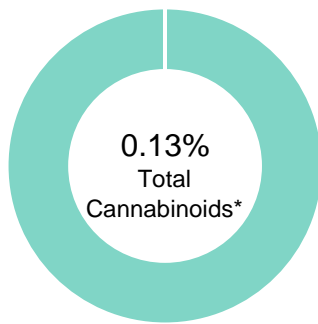


**Hemp Balm #18182**

<b>Batch ID:</b>	Hemp Balm #18182	<b>Test ID:</b>	3249555.004
<b>Reported:</b>	6-Sep-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)	0.00	0.00	0.0
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.00	0.00	0.0
Cannabidiolic acid (CBDA)	0.00	0.00	0.0
Cannabidiol (CBD)	0.00	0.13	1.3
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.00	0.00	0.0
Cannabinolic Acid (CBNA)	0.00	0.00	0.0
Cannabinol (CBN)	0.00	0.00	0.0
Cannabigerolic acid (CBGA)	0.00	0.00	0.0
Cannabigerol (CBG)	0.00	0.00	0.0
Tetrahydrocannabivarinic Acid (THCVA)	0.00	0.00	0.0
Tetrahydrocannabivarin (THCV)	0.00	0.00	0.0
Cannabidivarinic Acid (CBDVA)	0.00	0.00	0.0
Cannabidivarin (CBDV)	0.00	0.00	0.0
Cannabichromenic Acid (CBCA)	0.00	0.00	0.0
Cannabichromene (CBC)	0.00	0.00	0.0
<b>Total Cannabinoids</b>		<b>0.13</b>	<b>1.30</b>
Total Potential THC**		0.00	0.00
Total Potential CBD**		0.13	1.30

**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**

  
**Sam Smith**  
 6-Sep-2019  
 2:54 PM  
 PREPARED BY / DATE

  
**David Green**  
 6-Sep-2019  
 3:01 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



## Hemp Balm #18182

<b>Batch ID:</b>	Hemp Balm #18182	<b>Test ID:</b>	8419859.006
<b>Reported:</b>	9-Sep-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

  
Samantha Hoyle  
9-Sep-2019  
2:16 PM  
Greg Zimpfer  
9-Sep-2019  
2:57 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.

## Hemp Balm #18182

<b>Batch ID:</b>	Hemp Balm #18182	<b>Test ID:</b>	7799543.022
<b>Reported:</b>	11-Sep-2019	<b>Method:</b>	TM04
<b>Type:</b>	Topical		
<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  
11-Sep-2019  
3:34 PMGreg Zimpfer  
11-Sep-2019  
3:46 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

## Certificate of Analysis

### Elixinol, LLC

555 Burbank St. Unit J  
Broomfield Colorado 80020 United States

<b>Sample Name:</b>	<b>Hemp Balm #18182</b>	<b>Eurofins Sample:</b>	<b>8800807</b>
<b>Project ID</b>	ELIXINOL-20190906-0082	<b>Receipt Date</b>	06-Sep-2019
<b>PO Number</b>	CVD	<b>Receipt Condition</b>	Ambient temperature
<b>Lot Number</b>	Hemp Balm #18182	<b>Login Date</b>	06-Sep-2019
<b>Sample Serving Size</b>		<b>Date Started</b>	06-Sep-2019
		<b>Online Order</b>	13484-12352C5A

#### Analysis

#### Result

#### Enterobacteriaceae (Bile-Tolerant Gram-Negative Bacteria) \*

Enterobacterial Count <10 MPN/mL

#### Preparatory Testing of Nutritional and Dietary Supplements \*

Bile-Tolerant Gram-Neg Bacteria Suitability Result Pass\*\*

#### Metals Analysis by ICP-MS

Arsenic <0.0686 ppm  
Cadmium <0.0171 ppm  
Lead <0.0171 ppm  
Mercury <0.00857 ppm

#### Mycotoxins in Raw Materials

Aflatoxin B1 <0.500 ppb  
Aflatoxin B2 <0.500 ppb  
Aflatoxin G1 <0.500 ppb  
Aflatoxin G2 <0.500 ppb  
Ochratoxin A <1.00 ppb

#### Multi-Residue Analysis for hemp products - 60+ compounds

Matrix Type - To Determine Limit of Quantification (LOQ) Spices - Botanicals - and other Specialty Samples

Abamectin <0.05 mg/kg  
Aldicarb <0.05 mg/kg  
Aldicarb sulfone (Aldoxycarb) <0.05 mg/kg  
Aldicarb sulfoxide <0.05 mg/kg  
Azoxystrobin <0.05 mg/kg  
Bifenazate <0.05 mg/kg  
Bifenthrin <0.05 mg/kg  
Carbaryl <0.05 mg/kg  
Carbofuran <0.05 mg/kg  
Carbofuran-3-hydroxy- <0.05 mg/kg  
Chlorantraniliprole <0.05 mg/kg  
Chlordane, cis- <0.05 mg/kg  
Chlordane, trans- <0.05 mg/kg  
Chlorfenapyr <0.05 mg/kg  
Chlorpyrifos <0.05 mg/kg  
Coumaphos <0.05 mg/kg  
Cyfluthrin <0.05 mg/kg

\* This analysis or component is not ISO accredited.

## Certificate of Analysis

### Elixinol, LLC

555 Burbank St. Unit J  
Broomfield Colorado 80020 United States

<b>Sample Name:</b>	<b>Hemp Balm #18182</b>	<b>Eurofins Sample:</b>	<b>8800807</b>
<b>Project ID</b>	ELIXINOL-20190906-0082	<b>Receipt Date</b>	06-Sep-2019
<b>PO Number</b>	CVD	<b>Receipt Condition</b>	Ambient temperature
<b>Lot Number</b>	Hemp Balm #18182	<b>Login Date</b>	06-Sep-2019
<b>Sample Serving Size</b>		<b>Date Started</b>	06-Sep-2019
		<b>Online Order</b>	13484-12352C5A

### Analysis

### Result

#### Multi-Residue Analysis for hemp products - 60+ compounds

Cypermethrin	non-analyzable
Cyproconazole (2 diastereoisomers)	<0.05 mg/kg
Cyprodinil	<0.05 mg/kg
Dichlorvos	<0.05 mg/kg
Diclobutrazol	<0.05 mg/kg
Dipropetryn	<0.05 mg/kg
Disulfoton	<0.05 mg/kg
Endosulfan I (alpha-isomer)	<0.05 mg/kg
Endosulfan II (beta-isomer)	<0.05 mg/kg
Endosulfan sulfate	<0.05 mg/kg
Epoxiconazole	<0.05 mg/kg
Ethiofencarb	<0.05 mg/kg
Etofenprox	<0.05 mg/kg
Etoxazole	<0.05 mg/kg
Fenoxycarb	<0.05 mg/kg
Fenpropathrin	<0.05 mg/kg
Fenvalerate/Esfenvalerate (sum of isomers)	<0.05 mg/kg
Fipronil	<0.05 mg/kg
Fipronil desulfinyl	<0.05 mg/kg
Fipronil sulfone	<0.05 mg/kg
Imazalil	0.023 mg/kg
Imidacloprid	<0.05 mg/kg
Malathion	<0.05 mg/kg
Methiocarb	<0.05 mg/kg
Methiocarb sulfone	<0.05 mg/kg
Methiocarb sulfoxide	<0.05 mg/kg
Methomyl	<0.05 mg/kg
Mevinphos (E- and Z-isomers)	<0.05 mg/kg
Myclobutanil	<0.05 mg/kg
Naled (Dibrom)	<0.05 mg/kg
Paclobutrazol	<0.05 mg/kg
Permethrin (sum of isomers)	<0.05 mg/kg
Propoxur	<0.05 mg/kg
Spinetoram (spinosyns J and L)	<0.05 mg/kg

\* This analysis or component is not ISO accredited.

## Certificate of Analysis

Elixinol, LLC

555 Burbank St. Unit J  
Broomfield Colorado 80020 United States

<b>Sample Name:</b>	<b>Hemp Balm #18182</b>	<b>Eurofins Sample:</b>	<b>8800807</b>
<b>Project ID</b>	ELIXINOL-20190906-0082	<b>Receipt Date</b>	06-Sep-2019
<b>PO Number</b>	CVD	<b>Receipt Condition</b>	Ambient temperature
<b>Lot Number</b>	Hemp Balm #18182	<b>Login Date</b>	06-Sep-2019
<b>Sample Serving Size</b>		<b>Date Started</b>	06-Sep-2019
		<b>Online Order</b>	13484-12352C5A

### Analysis

### Result

#### Multi-Residue Analysis for hemp products - 60+ compounds

Spinosad (spinosyns A and D)	<0.05 mg/kg
Spirodiclofen	<0.05 mg/kg
Spiromesifen	<0.05 mg/kg
Spiromesifen enol	non-analyzable
Spirotetramat	<0.05 mg/kg
Spiroxamine (2 diastereoisomers)	<0.05 mg/kg
Tebuconazole	<0.05 mg/kg
Thiabendazole	<0.05 mg/kg
Thiabendazole-5-hydroxy-	<0.05 mg/kg
Thiacloprid	<0.05 mg/kg
Trifloxystrobin	<0.05 mg/kg
Metolachlor	<0.05 mg/kg
Pyrethrum (total)	<0.50 mg/kg

### Method References

### Testing Location

#### Enterobacteriaceae (Bile-Tolerant Gram-Negative Bacteria) (USPN2021)

Food Integ. Innovation-Madison NE

USP Current revision, Chapter 2021.

To satisfy the requirements of the USP, the Preparatory Test must be completed on each matrix.

\*\*Based on the results of the preparatory test, the detection limit stipulated is adequate for the enumeration of the specified microorganisms.

#### Metals Analysis by ICP-MS (ICP\_MS\_B\_S)

Food Integrity Innovation-Boulder

Methods for the Determination of Metals in Environmental Standards - Supplement 1, EPA-600/R-94-111, May 1994.

"Determination of Metals and Trace Elements in Water and Wastes by Inductively Coupled Plasma-Mass Spectrometry", USEPA Method 200.8, Revision 5.1, EMMC Version.

\* This analysis or component is not ISO accredited.

Printed: 17-Sep-2019 9:42 pm

Page 3 of 5

## Certificate of Analysis

Elixinol, LLC

555 Burbank St. Unit J  
Broomfield Colorado 80020 United States

Method References	Testing Location
<p><b>Multi-Residue Analysis for hemp products - 60+ compounds (PEST_HEMP)</b></p> <p><i>Official Methods of Analysis, AOAC Official Method 2007.01</i>, Pesticide Residues in Foods by Acetonitrile Extraction and Partitioning with Magnesium Sulfate, AOAC INTERNATIONAL (modified).</p> <p><i>CEN Standard Method EN 15662</i>: Food of plant origin - Determination of pesticide residues using GC-MS and/or LC-MS/MS following acetonitrile extraction/partitioning and clean-up by dispersive SPE - QuEChERS method.</p> <p>List of the tested pesticides and their limits of quantification (LOQs) are available upon request.</p>	<p><b>Food Integ. Innovation-Greenfield</b></p>
<p><b>Mycotoxins in Raw Materials (MYCO_REG_S)</b></p> <p>Varga, E., Glauner, T., Koppen, R., Mayer, K., Sulyok, M., Schumacher, R., Krska, R. and Berthiller, F., "Stable isotope dilution assay for the accurate determination of mycotoxins in maize by UHPLC-MS/MS," <i>Analytical and BioAnalytical Chemistry</i>, 402:2675-2686 (2012).</p>	<p><b>Food Integrity Innovation-Madison</b></p>
<p><b>Preparatory Testing of Nutritional and Dietary Supplements (USPN_PT)</b></p>	<p><b>Food Integ. Innovation-Madison NE</b></p>

## Certificate of Analysis

### Elixinol, LLC

555 Burbank St. Unit J  
Broomfield Colorado 80020 United States

#### Testing Location(s)

Released on Behalf of Eurofins by

#### Food Integrity Innovation-Boulder

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Ian Laessig - Manager



AT-1816

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Karelyn Koehn - Manager



2918.06

#### Food Integrity Innovation-Madison

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3301 Kinsman Blvd  
Madison WI 53704  
800-675-8375

Edward Ladwig - Director



2918.01

#### Food Integ. Innovation-Madison NE

Eurofins Food Chemistry Testing US, Inc.  
2102 Wright Street  
Madison WI 53704  
800-675-8375

Richard Higby - Director

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