

# HEMP LABORATORY TEST CERTIFICATE OF ANALYSIS



## Hemp Analysis - Summary

Tested by high-performance liquid chromatography with ultraviolet detection (HPLC-UV).

### TOTAL THC<sup>1</sup>

**PASSED<sup>2</sup>** Not Detected

### CANNABINOID PROFILE

**3.9%** Total CBD<sup>1</sup>  
**3.9%** Total Cannabinoids<sup>3</sup>  
**Terpenes** See page 2



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- 1) Total THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step: Total THC =  $\Delta^9\text{THC} + (\text{THCa} (0.877))$  and Total CBD =  $\text{CBD} + (\text{CBDa} (0.877))$ .
- 2) As defined by the 2018 Farm Bill, hemp must contain no more than 0.3% Total THC, defined as the concentration of delta-9 tetrahydrocannabinol ( $\Delta^9\text{-THC}$ ) post-decarboxylation - see formula above.
- 3) Total Cannabinoids result reflects the absolute sum of all cannabinoids detected.

## Additional Testing

Pass/Fail defined at action limits set by California Code of Regulations Title 16. Effective date: January 16, 2019. Authority: Section 26013, Business Professions Code. Reference: Sections 26100, 26104, and 26110, Business Professions Code.

**RESIDUAL PESTICIDES**  
**PASSED**

**MICROBIAL IMPURITIES**  
**PASSED**

**HEAVY METALS**  
**PASSED**

## Peppermint 1000mg

**Tested for:** Core CBD

**Address:**


**Batch #:**

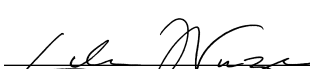
**Sample ID:** 190504L001

**Date Collected:** 05/04/2019

**Date Received:** 05/04/2019

## Final Approval

  
Anna Brown, QC Verified By  
Date: 10/01/2019

  
Josh Wurzer, President  
Date: 10/01/2019

These results relate only to the sample included on this report. This report shall not be reproduced except in full, without written approval of the laboratory. The uncertainty of measurement associated with the measurement result reported in this certificate is available from SC Laboratories upon request.



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SC Laboratories, LLC  
100 Pioneer Street, Suite E  
Santa Cruz, CA 95060  
(866) 435-0709 | sclabs.com

Sample Name: Peppermint 1000mg  
LIMS Sample ID: 190504L001  
Batch #:  
Sample Metric ID:  
Sample Type: Infused, Liquid Edible  
Batch Count:  
Sample Count:  
Unit Mass: 30 Grams per Unit  
Serving Mass:  
Density: 0.9332 g/mL

Date Collected: 05/04/2019  
Date Received: 05/04/2019  
Tested for: Core CBD  
License #:  
Address:  
Produced by:  
License #:  
Address:

**Overall result for batch: Pass**

## Moisture Test Results

	Results (%)
Moisture	NT

## Water Activity Test Results

	Results (Aw)	Action Limit Aw
Water Activity	NT	

## Cannabinoid Test Results

05/04/2019

Cannabinoid analysis utilizing High Performance Liquid Chromatography (HPLC, QSP 5-4-4-4)

	mg/mL	%	LOD / LOQ mg/mL
Δ9THC	ND	ND	0.0009 / 0.003
Δ8THC	ND	ND	0.0009 / 0.003
THCa	ND	ND	0.0009 / 0.003
THCV	ND	ND	0.0004 / 0.001
THCVa	ND	ND	0.0013 / 0.004
CBD	36.482	3.9093	0.0009 / 0.003
CBDa	ND	ND	0.0009 / 0.003
CBDV	ND	ND	0.0004 / 0.001
CBDVa	ND	ND	0.0003 / 0.001
CBG	ND	ND	0.001 / 0.003
CBGa	ND	ND	0.0008 / 0.002
CBL	ND	ND	0.0021 / 0.006
CBN	ND	ND	0.0009 / 0.003
CBC	ND	ND	0.0011 / 0.003
CBCa	ND	ND	0.0015 / 0.005

Sum of Cannabinoids:	36.482	3.9093	1094.460 mg/Unit
Total THC (Δ9THC+0.877*THCa)	ND	ND	ND
Total CBD (CBD+0.877*CBDa)	36.482	3.9093	1094.460 mg/Unit

	Action Limit mg		
Δ9THC per Unit	1000.0	Pass	ND
Δ9THC per Serving			

## Batch Photo



## Terpene Test Results

05/05/2019

Terpene analysis utilizing Gas Chromatography - Flame Ionization Detection (GC - FID)

	mg/g	%	LOD / LOQ mg/g
☑ Bisabolol	ND	ND	0.02 / 0.07
☑ Pinene	0.09	0.009	0.02 / 0.07
3 Carene	ND	ND	0.02 / 0.07
Borneol	0.36	0.036	0.02 / 0.07
☑ Caryophyllene	0.37	0.037	0.02 / 0.07
Geraniol	0.15	0.015	0.02 / 0.07
☑ Humulene	<LOQ	<LOQ	0.02 / 0.07
Terpinolene	<LOQ	<LOQ	0.02 / 0.07
Valencene	<LOQ	<LOQ	0.02 / 0.07
Menthol	3.46	0.346	0.02 / 0.07
Nerolidol	ND	ND	0.02 / 0.07
Camphene	ND	ND	0.02 / 0.07
Eucalyptol	0.63	0.063	0.02 / 0.07
☑ Cedrene	ND	ND	0.02 / 0.07
Camphor	ND	ND	0.02 / 0.07
(-)-Isopulegol	ND	ND	0.02 / 0.07
Sabinene	<LOQ	<LOQ	0.02 / 0.07
☑ Terpinene	<LOQ	<LOQ	0.02 / 0.07
☑ Terpinene	ND	ND	0.02 / 0.07
Linalool	<LOQ	<LOQ	0.02 / 0.07
Limonene	0.31	0.031	0.02 / 0.07
Myrcene	<LOQ	<LOQ	0.02 / 0.07
Fenchol	ND	ND	0.02 / 0.07
☑ Phellandrene	ND	ND	0.02 / 0.07
Caryophyllene Oxide	0.09	0.009	0.02 / 0.07
Terpineol	0.07	0.007	0.02 / 0.07
☑ Pinene	0.13	0.013	0.02 / 0.07
R-(+)-Pulegone	0.20	0.020	0.02 / 0.07
Geranyl Acetate	ND	ND	0.02 / 0.07
Citronellol	ND	ND	0.02 / 0.07
p-Cymene	<LOQ	<LOQ	0.02 / 0.07
Ocimene	<LOQ	<LOQ	0.02 / 0.07
Guaiol	0.11	0.011	0.02 / 0.07
Phytol	ND	ND	0.02 / 0.07
Isoborneol	ND	ND	0.02 / 0.07

**Total Terpene Concentration: 5.97 0.597**

## Sample Certification

California Code of Regulations Title 16 Effect Date January 16, 2019  
Authority: Section 26013, Business and Professions Code.  
Reference: Sections 26100, 26104 and 26110, Business and Professions Code.



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Sample must be marked as public to be viewable

Anna Brown, LQC Verified By  
Date: 10/01/2019

Josh Wurzer, President  
Date: 10/01/2019



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Density: 0.9332 g/mL

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Tested for: Core CBD  
License #:  
Address:  
Produced by:  
License #:  
Address:

**Overall result for batch: Pass**

## Pesticide Test Results - Pass

05/05/2019

Pesticide, Fungicide and plant growth regulator analysis utilizing HPLC-Mass Spectrometry and GC-Mass Spectrometry

		Results (µg/g)	Action Limit µg/g	LOD / LOQ µg/g
Abamectin	Pass	ND	0.3	0.030 / 0.091
Acephate	Pass	ND	5.0	0.013 / 0.039
Acequinocyl	Pass	ND	4.0	0.010 / 0.031
Acetamiprid	Pass	ND	5.0	0.013 / 0.038
Azoxystrobin	Pass	ND	40.0	0.015 / 0.047
Bifenazate	Pass	ND	5.0	0.012 / 0.035
Bifenthrin	Pass	ND	0.5	0.013 / 0.038
Boscalid	Pass	ND	10.0	0.008 / 0.023
Captan	Pass	ND	5.0	0.099 / 0.300
Carbaryl	Pass	ND	0.5	0.014 / 0.043
Chlorantraniliprole	Pass	ND	40.0	0.020 / 0.061
Clofentezine	Pass	ND	0.5	0.009 / 0.027
Cyfluthrin	Pass	ND	1.0	0.099 / 0.299
Cypermethrin	Pass	ND	1.0	0.030 / 0.091
Diazinon	Pass	ND	0.2	0.009 / 0.027
Dimethomorph	Pass	ND	20.0	0.018 / 0.055
Etoxazole	Pass	ND	1.5	0.007 / 0.022
Fenhexamid	Pass	ND	10.0	0.015 / 0.045
Fenpyroximate	Pass	ND	2.0	0.012 / 0.036
Flonicamid	Pass	ND	2.0	0.022 / 0.066
Fludioxonil	Pass	ND	30.0	0.020 / 0.061
Hexythiazox	Pass	ND	2.0	0.009 / 0.027
Imidacloprid	Pass	ND	3.0	0.017 / 0.050
Kresoxim-methyl	Pass	ND	1.0	0.010 / 0.029
Malathion	Pass	ND	5.0	0.006 / 0.019
Metalaxyl	Pass	ND	15.0	0.011 / 0.033
Methomyl	Pass	ND	0.1	0.022 / 0.067
Myclobutanil	Pass	ND	9.0	0.015 / 0.044
Naled	Pass	ND	0.5	0.010 / 0.031
Oxamyl	Pass	ND	0.2	0.014 / 0.042
Pentachloronitrobenzene	Pass	ND	0.2	0.020 / 0.061
Permethrin	Pass	ND	20.0	0.027 / 0.082
Phosmet	Pass	ND	0.2	0.010 / 0.030
Piperonylbutoxide	Pass	ND	8.0	0.007 / 0.020
Prallethrin	Pass	ND	0.4	0.011 / 0.032
Propiconazole	Pass	ND	20.0	0.004 / 0.013
Pyrethrins	Pass	ND	1.0	0.012 / 0.036
Pyridaben	Pass	ND	3.0	0.007 / 0.020
Spinetoram	Pass	ND	3.0	0.006 / 0.017
Spinosad	Pass	ND	3.0	0.010 / 0.031
Spiromesifen	Pass	ND	12.0	0.005 / 0.015
Spirotetramat	Pass	ND	13.0	0.014 / 0.042
Tebuconazole	Pass	ND	2.0	0.006 / 0.018
Thiamethoxam	Pass	ND	4.5	0.011 / 0.033
Trifloxystrobin	Pass	ND	30.0	0.007 / 0.020

## Mycotoxin Test Results

Mycotoxin analysis utilizing HPLC-Mass Spectrometry

	Results (µg/kg)	Action Limit µg/kg	LOD / LOQ µg/kg
Aflatoxin B1, B2, G1, G2	NT		
Ochratoxin A	NT		

## Pesticide Test Results - Pass

05/05/2019

Pesticide, Fungicide and plant growth regulator analysis utilizing HPLC-Mass Spectrometry and GC-Mass Spectrometry

		Results (µg/g)	Action Limit µg/g	LOD / LOQ µg/g
Aldicarb	Pass	ND	ND	0.030 / 0.091
Carbofuran	Pass	ND	ND	0.029 / 0.089
Chlordane	Pass	ND	ND	0.032 / 0.097
Chlorfenapyr	Pass	ND	ND	0.030 / 0.090
Chlorpyrifos	Pass	ND	ND	0.029 / 0.089
Coumaphos	Pass	ND	ND	0.029 / 0.089
Daminozide	Pass	ND	ND	0.030 / 0.091
DDVP (Dichlorvos)	Pass	ND	ND	0.029 / 0.089
Dimethoate	Pass	ND	ND	0.029 / 0.089
Ethoprop(hos)	Pass	ND	ND	0.029 / 0.089
Etofenprox	Pass	ND	ND	0.029 / 0.089
Fenoxycarb	Pass	ND	ND	0.029 / 0.089
Fipronil	Pass	ND	ND	0.029 / 0.089
Imazalil	Pass	ND	ND	0.029 / 0.089
Methiocarb	Pass	ND	ND	0.029 / 0.089
Methyl parathion	Pass	ND	ND	0.029 / 0.089
Mevinphos	Pass	ND	ND	0.029 / 0.089
Pacllobutrazol	Pass	ND	ND	0.029 / 0.089
Propoxur	Pass	ND	ND	0.029 / 0.089
Spiroxamine	Pass	ND	ND	0.029 / 0.089
Thiacloprid	Pass	ND	ND	0.029 / 0.089

## Heavy Metal Test Results - Pass

05/05/2019

Heavy metal analysis utilizing Inductively Coupled Plasma Mass Spectrometry (ICP-MS)

		Results (µg/g)	Action Limit µg/g	LOD / LOQ µg/g
Cadmium	Pass	ND	0.5	0.012 / 0.035
Lead	Pass	ND	0.5	0.031 / 0.095
Arsenic	Pass	ND	1.5	0.013 / 0.039
Mercury	Pass	<LOQ	3.0	0.002 / 0.005

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Address:  
Produced by:  
License #:  
Address:

**Overall result for batch: Pass**

**Residual Solvent Test Results**

Residual Solvent analysis utilizing Gas Chromatography - Mass Spectrometry (GC - MS)

	Results (µg/g)	Action Limit µg/g	LOD / LOQ µg/g
1,2-Dichloroethane	NT		
Benzene	NT		
Chloroform	NT		
Ethylene Oxide	NT		
Methylene chloride	NT		
Trichloroethylene	NT		
Acetone	NT		
Acetonitrile	NT		
Butane	NT		
Ethanol	NT		
Ethyl acetate	NT		
Ethyl ether	NT		
Heptane	NT		
Hexane	NT		
Isopropyl Alcohol	NT		
Methanol	NT		
Pentane	NT		
Propane	NT		
Toluene	NT		
Total Xylenes	NT		

**Note**

**Microbiological Test Results - Pass**

**05/06/2019**

PCR and fluorescence detection of microbiological impurities

	Pass	Results	Action Limit
Shiga toxin-producing Escherichia coli	Pass	ND	ND
Salmonella spp.	Pass	ND	ND
Aspergillus fumigatus	Pass	ND	ND
Aspergillus flavus	Pass	ND	ND
Aspergillus niger	Pass	ND	ND
Aspergillus terreus	Pass	ND	ND

3M Petrifilm and plate counts for microbiological contamination

	Results (cfu/g)
Aerobic Plate Count	NT
Total Yeast and Mold	NT

**Foreign Material Test Results**

NT

**Sample Certification**

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