

HEMP LABORATORY TEST CERTIFICATE OF ANALYSIS



Hemp Analysis - Summary

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

TOTAL THC¹

Not Detected²

CANNABINOID PROFILE

Not Detected Total CBD¹

97.2374% Total Cannabinoids³

Terpenes Not Tested



- 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

HEAVY METALS

PASSED

CBN-ISO-004

Tested for:

Address: - - -

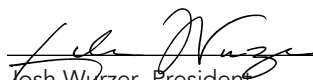
Batch #:

Sample ID: 191205P013

Date Collected: 12/05/2019

Date Received: 12/05/2019

Final Approval


Josh Wurzer, President
Date: 12/10/2019

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: CBN-ISO-004

LIMS Sample ID: 191205P013

Batch #:

Source Metr ID(s):

Sample Type: Concentrate, Product Inhalable

Batch Count:

Sample Count:

Unit Mass:

Serving Mass:

Density:

Date Collected: 12/05/2019

Date Received: 12/05/2019

Tested for:

License #:

Address: - - -

Produced by:

License #:

Address:

Moisture Test Results

	Results (%)
Moisture	NT

Cannabinoid Test Results

12/07/2019

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

	mg/g	%	LOD / LOQ mg/g
Δ9THC	ND	ND	0.052 / 0.158
Δ8THC	ND	ND	0.053 / 0.162
THCa	ND	ND	0.052 / 0.156
THCV	ND	ND	0.023 / 0.069
THCVa	ND	ND	0.091 / 0.276
CBD	ND	ND	0.052 / 0.158
CBDa	ND	ND	0.052 / 0.156
CBDV	ND	ND	0.021 / 0.063
CBDVa	ND	ND	0.037 / 0.111
CBG	ND	ND	0.030 / 0.092
CBGa	ND	ND	0.044 / 0.133
CBL	ND	ND	0.130 / 0.393
CBN	972.374	97.2374	0.052 / 0.157
CBC	ND	ND	0.031 / 0.094
CBCa	ND	ND	0.129 / 0.392

Sum of Cannabinoids: 972.374 97.2374

Total THC (Δ9THC+0.877*THCa) ND ND
Total CBD (CBD+0.877*CBDa) ND ND

Action Limit mg

Δ9THC per Unit
Δ9THC per Serving

Batch Photo



Terpene Test Results

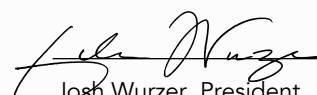
Terpene analysis utilizing Gas Chromatography - Flame Ionization Detection (GC - FID)

	mg/g	%	LOD / LOQ mg/g
□ Bisabolol	NT		
□ Pinene	NT		
3 Carene	NT		
Borneol	NT		
□ Caryophyllene	NT		
Geraniol	NT		
□ Humulene	NT		
Terpinolene	NT		
Valencene	NT		
Menthol	NT		
Nerolidol	NT		
Camphene	NT		
Eucalyptol	NT		
□ Cedrene	NT		
Camphor	NT		
(-)-Isopulegol	NT		
Sabinene	NT		
□ Terpinene	NT		
□ Terpinene	NT		
Linalool	NT		
Limonene	NT		
Myrcene	NT		
Fenchol	NT		
□ Phellandrene	NT		
Caryophyllene Oxide	NT		
Terpineol	NT		
□ Pinene	NT		
R-(+)-Pulegone	NT		
Geranyl Acetate	NT		
Citronellol	NT		
p-Cymene	NT		
Ocimene	NT		
Guaiol	NT		
Phytol	NT		
Isoborneol	NT		

Total Terpene Concentration: NT

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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Date: 12/10/2019



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Address:

Pesticide Test Results - Pass

12/09/2019

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	0.1	0.030 / 0.091
Acephate	Pass	ND	0.1	0.013 / 0.039
Acequinocyl	Pass	ND	0.1	0.010 / 0.031
Acetamiprid	Pass	ND	0.1	0.013 / 0.038
Azoxystrobin	Pass	ND	0.1	0.015 / 0.047
Bifenazate	Pass	ND	0.1	0.012 / 0.035
Bifenthrin	Pass	ND	3.0	0.013 / 0.038
Boscalid	Pass	ND	0.1	0.008 / 0.023
Captan	Pass	ND	0.7	0.099 / 0.300
Carbaryl	Pass	ND	0.5	0.014 / 0.043
Chlorantraniliprole	Pass	ND	10.0	0.020 / 0.061
Clofentezine	Pass	ND	0.1	0.009 / 0.027
Cyfluthrin	Pass	ND	2.0	0.099 / 0.299
Cypermethrin	Pass	ND	1.0	0.030 / 0.091
Diazinon	Pass	ND	0.1	0.009 / 0.027
Dimethomorph	Pass	ND	2.0	0.018 / 0.055
Etoazole	Pass	ND	0.1	0.007 / 0.022
Fenhexamid	Pass	ND	0.1	0.015 / 0.045
Fenpyroximate	Pass	ND	0.1	0.012 / 0.036
Flonicamid	Pass	ND	0.1	0.022 / 0.066
Fludioxonil	Pass	ND	0.1	0.020 / 0.061
Hexythiazox	Pass	ND	0.1	0.009 / 0.027
Imidacloprid	Pass	ND	5.0	0.017 / 0.050
Kresoxim-methyl	Pass	ND	0.1	0.010 / 0.029
Malathion	Pass	ND	0.5	0.006 / 0.019
Metalaxyl	Pass	ND	2.0	0.011 / 0.033
Methomyl	Pass	ND	1.0	0.022 / 0.067
Myclobutanil	Pass	ND	0.1	0.015 / 0.044
Naled	Pass	ND	0.1	0.010 / 0.031
Oxamyl	Pass	ND	0.5	0.014 / 0.042
Pentachloronitrobenzene	Pass	ND	0.1	0.020 / 0.061
Permethrin	Pass	ND	0.5	0.027 / 0.082
Phosmet	Pass	ND	0.1	0.010 / 0.030
Piperonylbutoxide	Pass	ND	3.0	0.007 / 0.020
Prallethrin	Pass	ND	0.1	0.011 / 0.032
Propiconazole	Pass	ND	0.1	0.004 / 0.013
Pyrethrins	Pass	ND	0.5	0.012 / 0.036
Pyridaben	Pass	ND	0.1	0.007 / 0.020
Spinetoram	Pass	ND	0.1	0.006 / 0.017
Spinosad	Pass	ND	0.1	0.010 / 0.031
Spiromesifen	Pass	ND	0.1	0.005 / 0.015
Spirotetramat	Pass	ND	0.1	0.014 / 0.042
Tebuconazole	Pass	ND	0.1	0.006 / 0.018
Thiamethoxam	Pass	ND	5.0	0.011 / 0.033
Trifloxystrobin	Pass	ND	0.1	0.007 / 0.020

Pesticide Test Results - Pass

12/09/2019

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
Paclobutrazol	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

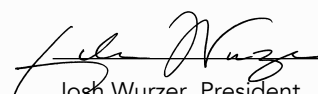
Mycotoxin Test Results

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		

Sample Certification

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Josh Wurzer, President
Date: 12/10/2019



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Sample Type: Concentrate, Product Inhalable

Batch Count:

Sample Count:

Unit Mass:

Serving Mass:

Density:

Date Collected: 12/05/2019

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Tested for:

License #:

Address: - - -

Produced by:

License #:

Address:

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		

Microbiological Test Results

PCR and fluorescence detection of microbiological impurities

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

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

Water Activity Test Results

	Results (Aw)	Action Limit Aw
Water Activity	NT	

Heavy Metal Test Results - Pass

12/09/2019

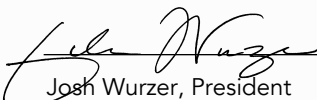
Heavy metal analysis utilizing Inductively Coupled Plasma Mass Spectrometry (ICP-MS)

		Results (µg/g)	Action Limit µg/g	LOD / LOQ µg/g
Cadmium	Pass	ND	0.2	0.012 / 0.035
Lead	Pass	ND	0.5	0.031 / 0.095
Arsenic	Pass	ND	0.2	0.013 / 0.039
Mercury	Pass	ND	0.1	0.002 / 0.005

Note

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