

HEMP LABORATORY TEST CERTIFICATE OF ANALYSIS



Hemp Analysis - Summary

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



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TOTAL THC¹

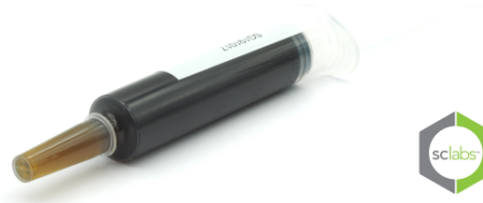
PASSED² 0.1453%

CANNABINOID PROFILE

4.1478% Total CBD¹

4.6608% Total Cannabinoids³

Terpenes NT



- 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.

HEAVY METALS

PASSED

MICROBIAL IMPURITIES

PASSED

RESIDUAL SOLVENTS

PASSED

MYCOTOXINS

PASSED

SG191017

Tested for: New York Hemp Oil

Address:

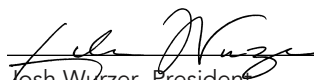
Batch #:

Sample ID: 191025S004

Date Collected: 10/25/2019

Date Received: 10/25/2019

Final Approval


Josh Wurzer, President
Date: 10/29/2019

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: SG191017

LIMS Sample ID: 191025S004

Batch #:

Source Metric ID(s):

Sample Type: Infused, Other

Batch Count:

Sample Count:

Unit Mass:

Serving Mass:

Density: 0.9378 g/mL

Date Collected: 10/25/2019

Date Received: 10/25/2019

Tested for: New York Hemp Oil

License #:

Address:

Produced by:

License #:

Address:

Overall result for batch: Pass

Moisture Test Results

	Results (%)
Moisture	NT

Cannabinoid Test Results

10/28/2019

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

	mg/g	%	LOD / LOQ mg/g
Δ9THC	1.453	0.1453	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	41.478	4.1478	0.0009 / 0.003
CBDa	ND	ND	0.0009 / 0.003
CBDV	0.390	0.0390	0.0004 / 0.001
CBDVa	ND	ND	0.0003 / 0.001
CBG	0.651	0.0651	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	2.636	0.2636	0.0011 / 0.003
CBCa	ND	ND	0.0015 / 0.005

Sum of Cannabinoids: 46.608 4.6608

Total THC (Δ9THC+0.877*THCa) 1.453 0.1453
Total CBD (CBD+0.877*CBDa) 41.478 4.1478

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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Sample must be marked as public to be viewable

Josh Wurzer, President
Date: 10/29/2019





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LIMS Sample ID: 191025S004
Batch #:
Source Metr ID(s):

Sample Type: Infused, Other
Batch Count:
Sample Count:
Unit Mass:
Serving Mass:
Density: 0.9378 g/mL

Date Collected: 10/25/2019
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Tested for: New York Hemp Oil

License #:
Address:

Produced by:

License #:
Address:

Overall result for batch: Pass

Pesticide Test Results

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	NT		
Acephate	NT		
Acequinocyl	NT		
Acetamiprid	NT		
Azoxystrobin	NT		
Bifenazate	NT		
Bifenthrin	NT		
Boscalid	NT		
Captan	NT		
Carbaryl	NT		
Chlorantraniliprole	NT		
Clofentezine	NT		
Cyfluthrin	NT		
Cypermethrin	NT		
Diazinon	NT		
Dimethomorph	NT		
Etoxazole	NT		
Fenhexamid	NT		
Fenpyroximate	NT		
Fonicamid	NT		
Fludioxonil	NT		
Hexythiazox	NT		
Imidacloprid	NT		
Kresoxim-methyl	NT		
Malathion	NT		
Metalaxyl	NT		
Methomyl	NT		
Myclobutanil	NT		
Naled	NT		
Oxamyl	NT		
Pentachloronitrobenzene	NT		
Permethrin	NT		
Phosmet	NT		
Piperonylbutoxide	NT		
Prallethrin	NT		
Propiconazole	NT		
Pyrethrins	NT		
Pyridaben	NT		
Spinetoram	NT		
Spinosad	NT		
Spiromesifen	NT		
Spirotetramat	NT		
Tebuconazole	NT		
Thiamethoxam	NT		
Trifloxystrobin	NT		

Pesticide Test Results

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	NT		
Carbofuran	NT		
Chlordane	NT		
Chlorfenapyr	NT		
Chlorpyrifos	NT		
Coumaphos	NT		
Daminozide	NT		
DDVP (Dichlorvos)	NT		
Dimethoate	NT		
Ethoprop(hos)	NT		
Etofenprox	NT		
Fenoxycarb	NT		
Fipronil	NT		
Imazalil	NT		
Methiocarb	NT		
Methyl parathion	NT		
Mevinphos	NT		
Padlobutrazol	NT		
Propoxur	NT		
Spiroxamine	NT		
Thiacloprid	NT		

Mycotoxin Test Results - Pass

10/27/2019

Mycotoxin analysis utilizing HPLC-Mass Spectrometry

	Results (µg/kg)	Action Limit µg/kg	LOD / LOQ µg/kg
Aflatoxin B1	Pass ND	20.0	1.0 / 3.0
Aflatoxin B2	Pass ND	20.0	2.0 / 6.0
Aflatoxin G1	Pass ND	20.0	1.0 / 3.0
Aflatoxin G2	Pass ND	20.0	2.0 / 6.0
Aflatoxin B1, B2, G1, G2	Pass ND	20.0	
Ochratoxin A	Pass ND	20.0	6.0 / 18.0

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License #:
Address:
Produced by:
License #:
Address:

Overall result for batch: Pass

Residual Solvent Test Results - Pass

10/27/2019

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

	Results (µg/g)	Action Limit µg/g	LOD / LOQ µg/g
1,2-Dichloroethane	Pass ND	1.0	0.111 / 0.336
Benzene	Pass ND	1.0	0.043 / 0.132
Chloroform	Pass ND	1.0	0.064 / 0.195
Ethylene Oxide	Pass ND	1.0	0.136 / 0.413
Methylene chloride	Pass ND	1.0	0.172 / 0.521
Trichloroethylene	Pass ND	1.0	0.040 / 0.120
Acetone	Pass ND	5000.0	14.703 / 44.549
Acetonitrile	Pass ND	410.0	2.727 / 8.262
Butane	Pass ND	5000.0	5.672 / 17.185
Ethanol	Pass ND	5000.0	11.775 / 35.679
Ethyl acetate	Pass ND	5000.0	16.227 / 49.169
Ethyl ether	Pass ND	5000.0	11.608 / 35.172
Heptane	Pass ND	5000.0	12.982 / 39.336
Hexane	Pass ND	290.0	1.816 / 5.502
Isopropyl Alcohol	Pass ND	5000.0	15.358 / 46.536
Methanol	Pass ND	3000.0	15.584 / 47.220
Pentane	Pass ND	5000.0	12.355 / 37.434
Propane	Pass ND	5000.0	1.359 / 4.117
Toluene	Pass ND	890.0	7.174 / 21.736
Total Xylenes	Pass ND	2170.0	34.438 / 104.347

Microbiological Test Results - Pass

10/28/2019

PCR and fluorescence detection of microbiological impurities

	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

Water Activity Test Results

Water Activity	Results (Aw)	Action Limit Aw
	NT	

Heavy Metal Test Results - Pass

10/29/2019

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 ND	3.0	0.002 / 0.005

Note

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