

(800) 448-0298 (707) 544-0298 fax: (707) 544-0266

> info@shikai.com www.shikai.com



# **CBD Topical Product Guarantee**

Product Name	CBD Double Strength Cream
Product Category	Topicals/Cosmetics (Not for consumption)
Instructions for use/Preparation	Apply a small amount to the affected area. Use as needed throughout the day. Store in a cool dry place. Do not take internally. Cannabidiol use while pregnant or breastfeeding may be harmful.
CBD Source	CBD sourced from hemp grown under federally authorized state pilot program (e.g. Kentucky, Oregon, or Colorado's R&D program) or approved hemp program.

NOTE: This product is not intended to diagnose, treat, cure or prevent any disease WARNING: The safety of this product has not been determined.

# **Batch Information**

Batch ID Number	21032
Batch Size	400 lbs
<b>Units Produced per SKU</b>	Item 54000 (2 oz): 2880 units
Manufacture date	02/01/2021
Expiration date	02/01/2023

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02/01/2021

Approved by Allison Ballard / Quality Assurance Manager

Date

# **Sc** labs<sup>\*\*</sup>

# Hemp Quality Assurance Testing CERTIFICATE OF ANALYSIS

DATE ISSUED 02/18/2021

#### SAMPLE NAME: CBD Double Strength Cream 21032\_#09

Infused, Non-Inhalable

#### CULTIVATOR / MANUFACTURER

Business Name: License Number: Address:

### DISTRIBUTOR / TESTED FOR

Business Name: Shikai Products License Number: Address:

#### SAMPLE DETAIL

Batch Number: Sample ID: 210203Q001

Date Collected: 02/03/2021 Date Received: 02/03/2021 Batch Size: Sample Size: 1.0 units Unit Mass: 1 grams per Unit Serving Size:



Scan QR code to verify authenticity of results.

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#### CANNABINOID ANALYSIS - SUMMARY

Total THC: **Not Detected** Total CBD: **10.260 mg/unit** Sum of Cannabinoids: 10.260 mg/unit Total Cannabinoids: 10.260 mg/unit Total THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during the decarboxylation step: Total THC =  $\Delta$ 97HC + (THCa (0.877)) Sum of Cannabinoids =  $\Delta$ 97HC + THCa + CBD + CBDa + CBG + CBGa + THCV + THCVa + CBC + CBCa + CBDVa +  $\Delta$ 87HC + CBL + CBN Total Cannabinoids = ( $\Delta$ 97HC+0.877\*THCa) + (CBD+0.877\*CBDa) + (CBG+0.877\*CBCa) + (CBDV+0.877\*CBCa) + (CBDV+0.877\*CBCa) + (CBDV+0.877\*CBCa) + (CBDV+0.877\*CBCa) + CBL + CBN Moisture: NT Density: NT Viscosity: NT

#### SAFETY ANALYSIS - SUMMARY

#### ∆9THC per Unit: @PASS

Foreign Material: NT

Water Activity: NT

Vitamin E Acetate: NT

#### Pesticides: 😡 PASS

Mycotoxins: NT

#### Residual Solvents: 🕝 PASS

#### Heavy Metals: 🕢 PASS

Microbial Impurities (PCR): NT

Microbial Impurities (Plating): NT

For quality assurance purposes. Not a Pre-Harvest Hemp Lab Test Report. 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.

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.

Decision Rule: Statements of conformity (e.g. Pass/Fail) to specifications are made in this report without taking measurement uncertainty into account. Where statements of conformity are made in this report, the following decision rules are applied: PASS - Results within limits/specifications, FAIL - Results exceed limits/specifications. References: limit of detection (LOD), limit of quantification (LOQ), not detected (ND), not tested (NT)

LQC verified by: Josh Antunovich Date: 02/18/2021

Approved by: Josh Wurzer, President Date: 02/18/2021

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## Hemp Quality Assurance Testing CERTIFICATE OF ANALYSIS

CBD DOUBLE STRENGTH CREAM 21032\_#09 | DATE ISSUED 02/18/2021



Tested by high-performance liquid chromatography with diode-array detection (HPLC-DAD).

Method: QSP 1157 - Analysis of Cannabinoids by HPLC-DAD

TOTAL THC: Not Detected

Total THC (∆9THC+0.877\*THCa)

#### TOTAL CBD: 10.260 mg/unit

Total CBD (CBD+0.877\*CBDa)

#### TOTAL CANNABINOIDS: 10.260 mg/unit

Total Cannabinoids (Total THC) + (Total CBD) + (Total CBG) + (Total THCV) + (Total CBC) + (Total CBDV) +  $\Delta$ 8THC + CBL + CBN

#### TOTAL CBG: ND

Total CBG (CBG+0.877\*CBGa)

#### TOTAL THCV: ND

Total THCV (THCV+0.877\*THCVa)

#### TOTAL CBC: ND Total CBC (CBC+0.877\*CBCa)

#### TOTAL CBDV: <LOQ

Total CBDV (CBDV+0.877\*CBDVa)

#### CANNABINOID TEST RESULTS - 02/05/2021

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
CBD	0.004/0.011	±0.4915	10.260	1.0260
CBDV	0.002/0.012	N/A	<loq< th=""><th><loq< th=""></loq<></th></loq<>	<loq< th=""></loq<>
Δ9ΤΗC	0.002/0.014	N/A	ND	ND
Δ8THC	0.01/0.02	N/A	ND	ND
THCa	0.001 / 0.005	N/A	ND	ND
THCV	0.002/0.012	N/A	ND	ND
THCVa	0.002/0.019	N/A	ND	ND
CBDa	0.001/0.026	N/A	ND	ND
CBDVa	0.001/0.018	N/A	ND	ND
CBG	0.002/0.006	N/A	ND	ND
CBGa	0.002/0.007	N/A	ND	ND
CBL	0.003/0.010	N/A	ND	ND
CBN	0.001/0.007	N/A	ND	ND
CBC	0.003/0.010	N/A	ND	ND
CBCa	0.001/0.015	N/A	ND	ND
SUM OF CANNA	BINOIDS		10.260 mg/g	1.026%

#### Unit Mass: 1 grams per Unit

Δ9THC per Unit	1120 per-package limit	ND	PASS
Total THC per Unit		ND	
CBD per Unit		10.260 mg/unit	
Total CBD per Unit		10.260 mg/unit	
Sum of Cannabinoids per Unit		10.260 mg/unit	
Total Cannabinoids per Unit		10.260 mg/unit	

#### MOISTURE TEST RESULT

#### DENSITY TEST RESULT

#### VISCOSITY TEST RESULT

Not Tested

Not Tested

Not Tested



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## Hemp Quality Assurance Testing CERTIFICATE OF ANALYSIS

CBD DOUBLE STRENGTH CREAM 21032\_#09 | DATE ISSUED 02/18/2021

# M Pesticide Analysis

#### **CATEGORY 1 AND 2 PESTICIDES**

Pesticide and plant growth regulator analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS) or gas chromatography-mass spectrometry (GC-MS). \*GC-MS utilized where indicated.

**Method:** QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS or QSP 1213 - Analysis of Pesticides by GC-MS

#### CATEGORY 1 PESTICIDE TEST RESULTS - 02/05/2021 🧭 PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (µg/g)	RESULT
Aldicarb	0.03/0.08	≥LOD	N/A	ND	PASS
Carbofuran	0.02 / 0.05	≥LOD	N/A	ND	PASS
Chlordane*	0.03/0.08	≥LOD	N/A	ND	PASS
Chlorfenapyr*	0.03/0.10	≥LOD	N/A	ND	PASS
Chlorpyrifos	0.02/0.06	≥LOD	N/A	ND	PASS
Coumaphos	0.02/0.07	≥LOD	N/A	ND	PASS
Daminozide	0.02/0.07	≥ LOD	N/A	ND	PASS
DDVP (Dichlorvos)	0.03/0.09	≥LOD	N/A	ND	PASS
Dimethoate	0.03/0.08	≥LOD	N/A	ND	PASS
Ethoprop(hos)	0.03/0.10	≥LOD	N/A	ND	PASS
Etofenprox	0.02 / 0.06	≥LOD	N/A	ND	PASS
Fenoxycarb	0.03/0.08	≥LOD	N/A	ND	PASS
Fipronil	0.03/0.08	≥LOD	N/A	ND	PASS
Imazalil	0.02 / 0.06	≥LOD	N/A	ND	PASS
Methiocarb	0.02/0.07	≥LOD	N/A	ND	PASS
Methyl parathion	0.03/0.10	≥LOD	N/A	ND	PASS
Mevinphos	0.03/0.09	≥LOD	N/A	ND	PASS
Paclobutrazol	0.02 / 0.05	≥LOD	N/A	ND	PASS
Propoxur	0.03/0.09	≥LOD	N/A	ND	PASS
Spiroxamine	0.03/0.08	≥LOD	N/A	ND	PASS
Thiacloprid	0.03/0.10	≥LOD	N/A	ND	PASS

#### CATEGORY 2 PESTICIDE TEST RESULTS - 02/05/2021 🕑 PASS

Abamectin	0.03 / 0.10	0.3	N/A	ND	PASS
Acephate	0.02/0.07	5	N/A	ND	PASS
Acequinocyl	0.02/0.07	4	N/A	ND	PASS
Acetamiprid	0.02/0.05	5	N/A	ND	PASS
Azoxystrobin	0.02/0.07	40	N/A	ND	PASS
Bifenazate	0.01/0.04	5	N/A	ND	PASS
Bifenthrin	0.02/0.05	0.5	N/A	ND	PASS
Boscalid	0.03/0.09	10	N/A	ND	PASS
Captan	0.19/0.57	5	N/A	ND	PASS
Carbaryl	0.02/0.06	0.5	N/A	ND	PASS
Chlorantraniliprole	0.04 / 0.12	40	N/A	ND	PASS

Continued on next page



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## Hemp Quality Assurance Testing CERTIFICATE OF ANALYSIS

CBD DOUBLE STRENGTH CREAM 21032\_#09 | DATE ISSUED 02/18/2021



# Pesticide Analysis Continued

#### **CATEGORY 1 AND 2 PESTICIDES**

Pesticide and plant growth regulator analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS) or gas chromatography-mass spectrometry (GC-MS). \*GC-MS utilized where indicated.

**Method:** QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS or QSP 1213 - Analysis of Pesticides by GC-MS

#### CATEGORY 2 PESTICIDE TEST RESULTS - 02/05/2021 continued 🥥 PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Clofentezine	0.03/0.09	0.5	N/A	ND	PASS
Cyfluthrin	0.12/0.38	1	N/A	ND	PASS
Cypermethrin	0.11/0.32	1	N/A	ND	PASS
Diazinon	0.02/0.05	0.2	N/A	ND	PASS
Dimethomorph	0.03/0.09	20	N/A	ND	PASS
Etoxazole	0.02/0.06	1.5	N/A	ND	PASS
Fenhexamid	0.03/0.09	10	N/A	ND	PASS
Fenpyroximate	0.02/0.06	2	N/A	ND	PASS
Flonicamid	0.03/0.10	2	N/A	ND	PASS
Fludioxonil	0.03/0.10	30	N/A	ND	PASS
Hexythiazox	0.02/0.07	2	N/A	ND	PASS
Imidacloprid	0.04/0.11	3	N/A	ND	PASS
Kresoxim-methyl	0.02/0.07	1	N/A	ND	PASS
Malathion	0.03/0.09	5	N/A	ND	PASS
Metalaxyl	0.02/0.07	15	N/A	ND	PASS
Methomyl	0.03/0.10	0.1	N/A	ND	PASS
Myclobutanil	0.03/0.09	9	N/A	ND	PASS
Naled	0.02/0.07	0.5	N/A	ND	PASS
Oxamyl	0.04/0.11	0.2	N/A	ND	PASS
Pentachloronitrobenzene*	0.03/0.09	0.2	N/A	ND	PASS
Permethrin	0.04/0.12	20	N/A	ND	PASS
Phosmet	0.03/0.10	0.2	N/A	ND	PASS
Piperonylbutoxide	0.02/0.07	8	N/A	ND	PASS
Prallethrin	0.03/0.08	0.4	N/A	ND	PASS
Propiconazole	0.02/0.07	20	N/A	ND	PASS
Pyrethrins	0.04/0.12	1	N/A	ND	PASS
Pyridaben	0.02/0.07	3	N/A	ND	PASS
Spinetoram	0.02/0.07	3	N/A	ND	PASS
Spinosad	0.02/0.07	3	N/A	ND	PASS
Spiromesifen	0.02/0.05	12	N/A	ND	PASS
Spirotetramat	0.02/0.06	13	N/A	ND	PASS
Tebuconazole	0.02/0.07	2	N/A	ND	PASS
Thiamethoxam	0.03/0.10	4.5	N/A	ND	PASS
Trifloxystrobin	0.03/0.08	30	N/A	ND	PASS



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# Hemp Quality Assurance Testing CERTIFICATE OF ANALYSIS

CBD DOUBLE STRENGTH CREAM 21032\_#09 | DATE ISSUED 02/18/2021



#### **CATEGORY 1 AND 2 RESIDUAL SOLVENTS** Residual Solvent analysis utilizing gas

chromatography-mass spectrometry (GC-MS).

Method: QSP 1204 - Analysis of Residual Solvents by GC-MS

#### CATEGORY 1 RESIDUAL SOLVENTS TEST RESULTS - 02/06/2021 🧭 PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
1,2-Dichloroethane	0.05/0.1	1	N/A	ND	PASS
Benzene	0.03/0.09	1	N/A	ND	PASS
Chloroform	0.1/0.2	1	N/A	ND	PASS
Ethylene Oxide	0.3/0.8	1	N/A	ND	PASS
Methylene chloride	0.3/0.9	1	N/A	ND	PASS
Trichloroethylene	0.1/0.3	1	N/A	ND	PASS

#### CATEGORY 2 RESIDUAL SOLVENTS TEST RESULTS - 02/06/2021 😡 PASS

Acetone	20/50	5000	N/A	ND	PASS
Acetonitrile	2/7	410	N/A	ND	PASS
Butane	10/50	5000	N/A	ND	PASS
Ethanol	20/50	5000	N/A	ND	PASS
Ethyl acetate	20/60	5000	N/A	ND	PASS
Ethyl ether	20/50	5000	N/A	ND	PASS
Heptane	20/60	5000	N/A	ND	PASS
Hexane	2/5	290	N/A	ND	PASS
Isopropyl Alcohol	10/40	5000	N/A	ND	PASS
Methanol	50 / 200	3000	N/A	ND	PASS
Pentane	20/50	5000	N/A	ND	PASS
Propane	10/20	5000	N/A	ND	PASS
Toluene	7/21	890	N/A	ND	PASS
Total Xylenes	50 / 160	2170	N/A	ND	PASS

### Heavy Metals Analysis

Heavy metal analysis utilizing inductively coupled plasma-mass spectrometry (ICP-MS).

Method: QSP 1160 - Analysis of Heavy Metals by ICP-MS

#### HEAVY METALS TEST RESULTS - 02/05/2021 😡 PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Cadmium	0.02/0.05	0.5	N/A	ND	PASS
Lead	0.04/0.1	0.5	N/A	ND	PASS
Arsenic	0.02/0.1	1.5	N/A	ND	PASS
Mercury	0.002/0.01	3	N/A	ND	PASS

#### NOTES

COA amended, update to order detail information



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# CERTIFICATE OF ANALYSIS: CRYSTALLINE CANNABIDIOL



## Product Name

CC - Crystalline Cannabidiol Batch Number 190007AC Manufacture Date October 8, 2019 Expiration Date October 2021

## Botanical Source

Industrial hemp, grown and processed in Kentucky, USA in compliance with Section 7415 of the Farm Bill and applicable Kentucky State Law and State Department of Agriculture regulations.

## Product Description

This product is hemp derived crystalline cannabidiol, isolated through CO<sub>2</sub> extraction and crystal precipitation.

# Qualitative Analysis

OBSERVATION	METHOD	RESULT
Foreign Matter	Gross Visual	Absent
Color	Gross Visual	White to Pale Yellow
Molds & Mildews	Gross Visual	Absent
Smell	Olfactory	Odorless to Slight Terpenoid
Product Feel	Tactile	Fine Powder

### Quantitative Analysis

Cannabinoid Analysis**		<b>RESULT: PASS</b>
IDENTIFICATION	METHOD	RESULT
Cannabinoid	UPLC-PDA	%wt/wt
Cannabidivarin (CBDV)	UPLC-PDA	0.09%
Cannabidiol (CBD)	UPLC-PDA	99.16%
Cannabidiolic Acid (CBDA)	UPLC-PDA	N/D
Cannabinol (CBN)	UPLC-PDA	N/D
$\Delta$ -9-Tetrahydrocannabinol ( $\Delta$ -9-THC)	UPLC-PDA	N/D
Cannabichromene (CBC)	UPLC-PDA	N/D
Tetrahydrocannabinolic Acid (THCA)	UPLC-PDA	N/D
Cannabigerol Acid (CBGA)	UPLC-PDA	N/D
Cannabigerol (CBG)	UPLC-PDA	N/D
$\Delta$ -8-Tetrahydrocannabinol ( $\Delta$ -8-THC)	UPLC-PDA	N/D

*\*\*Denotes third party analysis. Source data available upon request. LOQ Limit of quantitation* 

N/D None detected above the limits of detection

#### GenCanna Global 4274 Colby Rd. Winchester, KY, 40391 Page 1 of 1



CN: Cannabinoid Profile & Potency [WI-10-17 & WI-10-17-01] Analyst: RAS Test Date: 10/18/2019

The client sample was analyzed for plant-based cannabinoids by Liquid Chromatography (LC). The collected data was compared to data collected for certified reference standards at known concentrations.

#### 67555-CN

ID	Weight %	Concentration (mg/g)			
D9-THC	ND	ND			
THCV	ND	ND			
CBD	99.16	991.61			
CBDV	0.09	0.92			
CBG	ND	ND			
CBC	ND	ND			
CBN	ND	ND			
THCA	ND	ND			
CBDA	ND	ND			
CBGA	ND	ND			
D8-THC	ND	ND			
exo-THC	ND	ND			
Total	99.25	992.53	0%	Cannabinoids (wt%)	99.2%
Max THC	ND	ND			
Max CBD	99.16	991.61			

#### Limit of Quantitation (LOQ) = 0.05 wt%

Max THC (and Max CBD) are calculated values for total cannabinoids after heating, assuming complete decarboxylation of the acid to the neutral form. It is calculated based on the weight loss of the acid group during decarboxylation: Max THC =  $(0.877 \times THCA) + THC$ . This calculation does not include other cannabinoid isomers (eg. D8-THC and exo-THC). ND = None detected above the limits of detection (LOD), which is half of LOQ.

EA: Elemental Analysis [WI-10-13]	Analyst: JFD	Test Date: 10/18/2019
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This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

#### 67555-EA

Symbol	Metal	Conc. <sup>1</sup> (µg/kg)	RL (µg/kg)	Limits <sup>2</sup> (µg/kg)	Status
Al	Aluminum	1,187	50		
As	Arsenic	ND	50	200	PASS
Cd	Cadmium	ND	50	200	PASS
Ca	Calcium	4,086	500	-	
Cr	Chromium	ND	50	300	PASS
Co	Cobalt	ND	50	300	PASS
Cu	Copper	160	50	3,000	PASS
Fe	Iron	251	50	-	
Pb	Lead	ND	50	500	PASS
Mg	Magnesium	12,273	50	-	
Mn	Manganese	ND	50	-	
Hg	Mercury	ND	50	100	PASS
Мо	Molybdenum	ND	50	1,000	PASS
Ni	Nickel	ND	50	500	PASS
Р	Phosphorus	3,987	500	-	
K	Potassium	1,534	500	-	
Se	Selenium	ND	50	-	
Ag	Silver	ND	50	700	PASS
S	Sulfur	ND	500	-	
Sn	Tin	1,670	500	6,000	PASS
Zn	Zinc	335	50	-	

1) ND = None detected to the Method Detection Limit (MDL)

2) USP recommended maximum daily limits for inhalational drug product.

Certificate ID: 67555

190007AC (Isolates - CBD)

MB1: Microbiological Contaminants [WI-10-09]	Analyst: MJC	Test Date: 10/11/2019

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

#### 67555-MB1

Symbol	Analysis	Results	Units	Limits*	Status
AC	Total Aerobic Bacterial Count	<100	CFU/g	100,000 CFU/g	PASS
CC	Total Coliform Bacterial Count	<100	CFU/g	1,000 CFU/g	PASS
EB	Total Bile Tolerant Gram Negative Count	<100	CFU/g	1,000 CFU/g	PASS
YM	Total Yeast & Mold	<100	CFU/g	10,000 CFU/g	PASS

Note: All recorded Microbiological tests are within the established limits.

<b>MD2:</b> Painogenic Dacieriai Contaminanis [W1-10-10] Analysi. LabAamin Test Date. 10/12/2019	MB2: Pathogenic Bacterial Contaminants [WI-10-10]	Analyst: LabAdmin	Test Date: 10/12/2019
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This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

#### 67555-MB2

Test ID	Analysis	Results	Units	Limits*	Status
67555-ECPT	E. coli (O157)	Negative	NA	Non Detected	PASS
67555-SPT	Salmonella	Negative	NA	Non Detected	PASS

Note: All recorded pathogenic bacteria tests passed.

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This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

#### 67555-MY

Test ID	Date	Results	MDL	Limits	Status*	
Total Aflatoxin	10/16/2019	< MDL	2 ppb	< 20 ppb	PASS	
Total Ochratoxin	10/16/2019	< MDL	3 ppb	< 20 ppb	PASS	

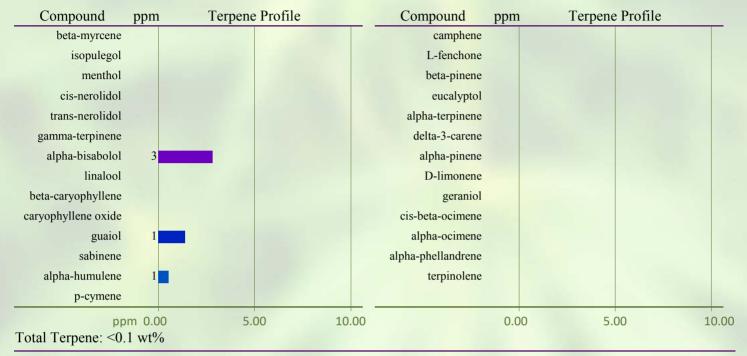
Analyst: CMA

Test Date: 10/15/2019

#### TP: Terpenes Profile [WI-10-27]

The client sample was analyzed by Head-Space Gas Chromatography (HS-GC). The collected data was compared to data collected for certified reference standards at known concentrations. All values are semiquantitative estimates based on recorded peak areas relative to terpene calibration data.

#### 67555-TP



### VC: Analysis of Volatile Organic Compounds [WI-10-28] Analyst: CMA Test Date: 10/14/2019

The client sample was analyzed by Head-Space Gas Chromatography (HS-GC). The collected data was compared to data collected for certified reference standards at known concentrations.

#### 67555-VC

Compound	CAS	Amount <sup>1</sup>	Limit <sup>2</sup>	RL	Status
Propane	74-98-6	ND	1,000 ppm	100	PASS
Isobutane	75-28-5	ND	1,000 ppm	100	PASS
Butane	106-97-8	ND	1,000 ppm	100	PASS
Methanol	67-56-1	ND	3,000 ppm	100	PASS
Pentane	109-66-0	ND	5,000 ppm	100	PASS
Ethanol	64-17-5	ND	5,000 ppm	100	*
Acetone	67-64-1	ND	5,000 ppm	100	PASS
Isopropanol	67-63-0	ND	5,000 ppm	100	PASS
Acetonitrile	75-05-8	ND	410 ppm	100	PASS
Hexane	110-54-3	ND	290 ppm	100	PASS
Heptane	142-82-5	ND	5,000 ppm	100	PASS

1) ND = Not detected at a level greater than the Reporting Limit (RL).

2) In ppm, based on USP recommended limits for residual solvents, adopted by the Massachusetts Department of Public Health for cannabis concentrates and extracts on 3/31/16. Butane/Propane limits are based on limits established for state of Colorado.

(\*) For ethanol, as many formulations contain flavorings based on ethanol extracts of natural products, no status has been assigned.

### **END OF REPORT**



#### GenCanna Global

4274 Colby Rd. Winchester, KY 40391

Client Sample ID:	190007AC
PAL Sample ID:	P193162-05

<b>Report Number:</b>	P193162
<b>Report Date:</b>	October 24, 2019
<b>Client Project ID:</b>	
Sample Date:	10/09/2019
<b>Received Date:</b>	10/10/2019
<b>Extraction Date:</b>	10/14/2019

# **Certificate of Analysis**

Analysis Date	Analyte	Amount Detected	LOQ (mg/kg)	Notes	Analysis Date	Analyte	Amount Detected	LOQ (mg/kg)	Notes
JASBC 69(	3):121-126, 2011 (GC	-MS/MS)							
10/15/2019	a-BHC	ND	0.20		10/15/2019	Aldrin	ND	0.20	
10/15/2019	b-BHC	ND	0.20		10/15/2019	Benfluralin	ND	0.20	
10/15/2019	Bolstar	ND	0.20		10/15/2019	Bromopropylate	ND	0.20	
10/15/2019	Captan	ND	4.0		10/15/2019	Chlordane	ND	0.20	
10/15/2019	Chlorfenapyr	ND	0.20		10/15/2019	Chloroneb	ND	0.20	
10/15/2019	Chlorothalonil	ND	0.20		10/15/2019	Chlorpropham	ND	0.20	
10/15/2019	Chlorpyrifos	ND	0.20		10/15/2019	Chlorpyrifos-methyl	ND	0.20	
10/15/2019	cis-Nonachlor	ND	0.20		10/15/2019	Cyfluthrin	ND	1.0	
10/15/2019	Cypermethrin	ND	1.0		10/15/2019	Dacthal	ND	0.20	
10/15/2019	d-BHC	ND	0.20		10/15/2019	Deltamethrin	ND	1.0	
10/15/2019	Diazinon	ND	0.20		10/15/2019	Dichlobenil	ND	0.20	
10/15/2019	Dichlorofenthion	ND	0.20		10/15/2019	Dichlorvos	ND	0.20	
10/15/2019	Diclofop-methyl	ND	0.20		10/15/2019	Dicloran	ND	1.0	
10/15/2019	Dicofol	ND	0.20		10/15/2019	Diphenamid	ND	0.20	
10/15/2019	Dithiopyr	ND	0.20		10/15/2019	Esfenvalerate	ND	0.20	
10/15/2019	Ethalfluralin	ND	0.20		10/15/2019	Ethofumesate	ND	0.20	
10/15/2019	Ethoprophos	ND	0.20		10/15/2019	Ethoxyquin	ND	0.20	
10/15/2019	Etoxazole	ND	0.20		10/15/2019	Etridiazole	ND	0.20	
10/15/2019	Fenarimol	ND	0.20		10/15/2019	Fenvalerate	ND	0.20	
10/15/2019	Fipronil	ND	0.20		10/15/2019	Fludioxonil	ND	0.20	
10/15/2019	Flutolanil	ND	0.20		10/15/2019	g-BHC	ND	0.20	
10/15/2019	Heptachlor	ND	0.20		10/15/2019	Heptachlor epoxide	ND	0.20	
10/15/2019	Hexachlorobenzene	ND	0.20		10/15/2019	Kresoxim-methyl	ND	0.20	
10/15/2019	lambda-Cyhalothrin	ND	0.57		10/15/2019	Malathion	ND	0.20	
10/15/2019	Mefenoxam	ND	0.20		10/15/2019	Metolachlor	ND	0.20	
10/15/2019	MGK-264	ND	0.20		10/15/2019	Myclobutanil	ND	0.20	
10/15/2019	o-Phenylphenol	ND	0.40		10/15/2019	Oxadiazon	ND	0.20	
10/15/2019	Oxyfluorfen	ND	0.40		10/15/2019	p,p'-DDD	ND	0.20	
10/15/2019	p,p'-DDE	ND	0.20		10/15/2019	p,p'-DDT	ND	0.20	
10/15/2019	Paclobutrazol	ND	0.20		10/15/2019	Parathion-methyl	ND	0.20	
10/15/2019	Pendimethalin	ND	0.20		10/15/2019	Pentachlorophenyl methyl sulfide	ND	0.20	
10/15/2019	Permethrin	ND	0.40		10/15/2019	Pirimicarb	ND	0.20	
10/15/2019	Procymidone	ND	0.20		10/15/2019	Prodiamine	ND	0.40	
10/15/2019	Pronamide	ND	0.20		10/15/2019	Pyriproxyfen	ND	0.20	
10/15/2019	Quinoxyfen	ND	0.20		10/15/2019	Spirodiclofen	ND	0.20	
10/15/2019	Tetraconazole	ND	0.20		10/15/2019	trans-Nonachlor	ND	0.20	

Ridal Jula

Rick Jordan, Laboratory Manager



#### GenCanna Global

4274 Colby Rd. Winchester, KY 40391

# Client Sample ID: 190007AC PAL Sample ID: P193162-05

<b>Report Number:</b>	P193162
<b>Report Date:</b>	October 24, 2019
<b>Client Project ID:</b>	
Sample Date:	10/09/2019
<b>Received Date:</b>	10/10/2019
<b>Extraction Date:</b>	10/14/2019

# **Certificate of Analysis**

## (Continued)

Analysis		Amount	LOQ		Analysis		Amount	LOQ	
Date	Analyte	Detected	(mg/kg)	Notes	Date	Analyte	Detected	(mg/kg)	Notes
ASBC 69(2	3):121-126, 2011 (GC-	MS/MS) (Con	tinued)						
10/15/2019	, , , ,	ND	0.20						
ASBC 69(3	3):121-126, 2011 (LC-I	MS/MS)							
10/15/2019	3-Hydroxycarbofuran	ND	0.20		10/15/2019	Abamectin	ND	1.0	
10/15/2019	Acephate	ND	0.80		10/15/2019	Acequinocyl-Hydroxy	ND	1.0	
10/15/2019	Acetamiprid	ND	0.20		10/15/2019	Aldicarb	ND	0.20	
10/15/2019	Aldicarb Sulfone	ND	0.20		10/15/2019	Aldicarb Sulfoxide	ND	0.20	
10/15/2019	Ametoctradin	ND	0.20		10/15/2019	Atrazine	ND	0.20	
10/15/2019	Azinphos-methyl	ND	0.40		10/15/2019	Azoxystrobin	ND	0.20	
10/15/2019	Bendiocarb	ND	0.20		10/15/2019	Bensulide	ND	0.20	
10/15/2019	Bifenazate	ND	0.20		10/15/2019	Bifenthrin	ND	0.20	
10/15/2019	Boscalid	ND	0.20		10/15/2019	Bromacil	ND	0.20	
10/15/2019	Carbaryl	ND	0.20		10/15/2019	Carbendazim	ND	0.20	
10/15/2019	Carbofuran	ND	0.20		10/15/2019	Carfentrazone-ethyl	ND	0.20	
10/15/2019	Chlorantraniliprole	ND	0.20		10/15/2019	Clethodim	ND	0.40	
10/15/2019	Clofentezine	ND	0.20		10/15/2019	Clothianidin	ND	0.20	
10/15/2019	Cyanazine	ND	0.20		10/15/2019	Cyantraniliprole	ND	0.20	
10/15/2019	Cyazofamid	ND	0.20		10/15/2019	Cycloate	ND	0.50	
10/15/2019	Cyflufenamid	ND	0.20		10/15/2019	Cyflumetofen	ND	0.20	
10/15/2019	Cymoxanil	ND	0.20		10/15/2019	Daminozide	ND	1.0	
	DCPMU	ND	0.20		10/15/2019	Diazoxon	ND	0.20	
10/15/2019	Diflubenzuron	ND	0.20		10/15/2019	Dimethoate	ND	0.20	
10/15/2019	Dimethomorph	ND	0.20		10/15/2019	Dinotefuran	ND	0.20	
10/15/2019	Disulfoton sulfone	ND	0.20		10/15/2019	Diuron	ND	0.20	
10/15/2019	d-Phenothrin	ND	0.50		10/15/2019	Etofenprox	ND	0.20	
10/15/2019	Famphur	ND	0.20		10/15/2019	Fenamidone	ND	0.20	
10/15/2019	Fenamiphos sulfone	ND	0.20		10/15/2019	Fenamiphos sulfoxide	ND	0.20	
10/15/2019	Fenazaquin	ND	0.20		10/15/2019	Fenbuconazole	ND	0.20	
10/15/2019	Fenoxycarb	ND	0.20		10/15/2019	Fenpropathrin	ND	0.20	
10/15/2019	Fenpyroximate	ND	0.20		10/15/2019	Flonicamid	ND	1.0	
10/15/2019	Fluometuron	ND	0.20		10/15/2019	Fluopicolide	ND	0.20	
10/15/2019	Fluopyram	ND	0.20		10/15/2019	Fluoxastrobin	ND	0.20	
10/15/2019	Flupyradifurone	ND	0.20		10/15/2019	Fluridone	ND	0.20	
10/15/2019	Flutriafol	ND	0.20		10/15/2019	Fluvalinate	ND	0.20	
10/15/2019	Fluxapyroxad	ND	0.20		10/15/2019	Formetanate HCl	ND	0.20	
10/15/2019	Hexazinone	ND	0.20		10/15/2019	Hexythiazox	ND	0.20	
10/13/2019	TICAAZIIIUIIC		0.20		10/15/2019	TICAYUIIaZOX	ND 1	0.20	

Ridal Jula

Rick Jordan, Laboratory Manager



#### GenCanna Global

4274 Colby Rd. Winchester, KY 40391

Client Sample ID:	190007AC
PAL Sample ID:	P193162-05

<b>Report Number:</b>	P193162
<b>Report Date:</b>	October 24, 2019
<b>Client Project ID:</b>	
Sample Date:	10/09/2019

 Received Date:
 10/10/2019

 Extraction Date:
 10/14/2019

# **Certificate of Analysis**

## (Continued)

Analysis Date	Analyte	Amount Detected	LOQ (mg/kg)	Notes	Analysis Date	Analyte	Amount Detected	LOQ (mg/kg)	Notes
JASBC 69(	3):121-126, 2011 (LC-M	S/MS) (Conti	nued)						
10/15/2019	Indaziflam	ND	0.20		10/15/2019	Indoxacarb	ND	0.20	
10/15/2019	Isoxaben	ND	0.20		10/15/2019	Linuron	ND	0.20	
10/15/2019	Malaoxon	ND	0.20		10/15/2019	Mandipropamid	ND	0.20	
10/15/2019	Metconazole	ND	0.20		10/15/2019	Methamidophos	ND	0.80	
10/15/2019	Methidathion	ND	0.20		10/15/2019	Methiocarb	ND	0.20	
10/15/2019	Methomyl	ND	0.20		10/15/2019	Methoxyfenozide	ND	0.20	
10/15/2019	Metrafenone	ND	0.20		10/15/2019	Mevinphos	ND	0.20	
10/15/2019	Norflurazon	ND	0.20		10/15/2019	Novaluron	ND	0.20	
10/15/2019	Omethoate	ND	0.20		10/15/2019	Oxadixyl	ND	1.0	
10/15/2019	Oxamyl	ND	0.20		10/15/2019	Oxydemeton-Methyl	ND	0.20	
10/15/2019	Penthiopyrad	ND	0.20		10/15/2019	Phorate Sulfone	ND	1.0	
10/15/2019	Phorate Sulfoxide	ND	0.20		10/15/2019	Phosalone	ND	0.20	
10/15/2019	Phosmet	ND	0.20		10/15/2019	Phosphamidon	ND	0.20	
10/15/2019	Piperonyl Butoxide	ND	1.0		10/15/2019	Pirimiphos-methyl	ND	0.20	
10/15/2019	Prallethrin	ND	0.20		10/15/2019	Prometon	ND	0.20	
10/15/2019	Prometryn	ND	0.20		10/15/2019	Propamocarb	ND	0.20	
10/15/2019	Propargite	ND	0.20		10/15/2019	Propiconazole	ND	0.40	
10/15/2019	Propoxur	ND	0.20		10/15/2019	Pymetrozine	ND	0.20	
10/15/2019	Pyraclostrobin	ND	0.20		10/15/2019	Pyraflufen-ethyl	ND	0.20	
10/15/2019	Pyrethrin	ND	1.0		10/15/2019	Pyridaben	ND	0.20	
10/15/2019	Pyrimethanil	ND	0.20		10/15/2019	Rotenone	ND	0.20	
10/15/2019	Sethoxydim	ND	0.40		10/15/2019	Siduron	ND	0.20	
10/15/2019	Simazine	ND	0.20		10/15/2019	Simetryn	ND	0.20	
10/15/2019	Spinetoram	ND	0.20		10/15/2019	Spinosad	ND	0.20	
10/15/2019	Spiromesifen	ND	0.40		10/15/2019	Spirotetramat	ND	0.20	
10/15/2019	Spiroxamine	ND	0.20		10/15/2019	Sulfoxaflor	ND	0.20	
10/15/2019	Tebuconazole	ND	0.20		10/15/2019	Tebufenozide	ND	0.20	
10/15/2019	Tebuthiuron	ND	0.20		10/15/2019	Terbuthylazine	ND	0.20	
10/15/2019	Thiabendazole	ND	0.20		10/15/2019	Thiacloprid	ND	0.20	
10/15/2019	Thiamethoxam	ND	0.20		10/15/2019	Thiobencarb	ND	0.20	
10/15/2019	Thiodicarb	ND	0.20		10/15/2019	Tolfenpyrad	ND	0.20	
10/15/2019	Triadimefon	ND	0.20		10/15/2019	Triadimenol	ND	0.40	
10/15/2019	Trifloxystrobin	ND	0.20		10/15/2019	Triflumizole	ND	0.20	

Ridal Jula

Rick Jordan, Laboratory Manager



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GenCanna Global		Report Number:	P193162			
4274 Colby Rd.		Report Date:	October 24, 2019			
Winchester, KY 403	91	<b>Client Project ID:</b>				
<b>Client Sample ID:</b>	190007AC	Sample Date:	10/09/2019			
PAL Sample ID:	P193162-05	Received Date:	10/10/2019			
		Extraction Date:	10/14/2019			

#### **Notes and Definitions**

Notes	<b>Definition</b>
LOQ	Limit of Quantitation
ND	Not Detected
*	Not included under current scope of accreditation

The results contained in this report relate only to the items tested.

The results reflect the condition of the samples as received by PAL.

Samples will be stored for a minimum of 60 days after the final report is issued, as described in our Quality Manual.

Reports should not be reproduced, except in full, without written approval from PAL.

PAL is accredited to ISO/IEC 17025:2017 Standard, by PJLA, Accreditation #64422, Testing.

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Rick Jordan, Laboratory Manager