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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 | 21070 |
| Batch Size | 400 lbs |
| Units Produced per SKU | Item 54000 (2 oz): 2880 units |
| Manufacture date | 03/11/2021 |
| Expiration date | 03/11/2023 |

Approved by Allison Ballard / Quality Assurance Manager

03/11/2021

Date

SAMPLE NAME: CBD Cream Double Strength 21070_#10

Infused, Non-Inhalable

CULTIVATOR / MANUFACTURER

Business Name:
License Number:
Address:

DISTRIBUTOR / TESTED FOR

Business Name: Shikai Products
License Number:
Address:

SAMPLE DETAIL

Batch Number: 21070
Sample ID: 210316S004

Date Collected: 03/16/2021
Date Received: 03/16/2021
Batch Size:
Sample Size: 1.0 units
Unit Mass: 1 grams per Unit
Serving Size:



Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY

Total THC: Not Detected

Total CBD: 10.517 mg/unit

Sum of Cannabinoids: 10.517 mg/unit

Total Cannabinoids: 10.517 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 = $\Delta 9\text{THC} + (\text{THCa} \cdot 0.877)$
Total CBD = $\text{CBD} + (\text{CBDA} \cdot 0.877)$
Sum of Cannabinoids = $\Delta 9\text{THC} + \text{THCa} + \text{CBD} + \text{CBDA} + \text{CBG} + \text{CBGa} + \text{THCV} + \text{THCVa} + \text{CBC} + \text{CBCa} + \text{CBDV} + \text{CBDVa} + \Delta 8\text{THC} + \text{CBL} + \text{CBN}$
Total Cannabinoids = $(\Delta 9\text{THC} + 0.877 \cdot \text{THCa}) + (\text{CBD} + 0.877 \cdot \text{CBDA}) + (\text{CBG} + 0.877 \cdot \text{CBGa}) + (\text{THCV} + 0.877 \cdot \text{THCVa}) + (\text{CBC} + 0.877 \cdot \text{CBCa}) + (\text{CBDV} + 0.877 \cdot \text{CBDVa}) + \Delta 8\text{THC} + \text{CBL} + \text{CBN}$

Moisture: NT

Density: NT

Viscosity: NT

SAFETY ANALYSIS - SUMMARY

$\Delta 9\text{THC}$ per Unit: PASS

Foreign Material: NT

Water Activity: NT

Vitamin E: NT

Pesticides: PASS

Mycotoxins: NT

Residual Solvents: PASS

Heavy Metals: PASS

Microbial Impurities (PCR): NT

Microbial Impurities (Plating): ND

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) too numerous to count >250 cfu/plate (TNTC), colony-forming unit (cfu)

Lisi Johnson
LQC verified by: Lisi Johnson
Date: 03/22/2021

Josh Wurzer
Approved by: Josh Wurzer, President
Date: 03/22/2021



Cannabinoid Analysis

PLATING

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 ($\Delta 9\text{THC} + 0.877 * \text{THCa}$)

TOTAL CBD: 10.517 mg/unit

Total CBD ($\text{CBD} + 0.877 * \text{CBDa}$)

TOTAL CANNABINOIDS: 10.517 mg/unit

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

TOTAL CBG: ND

Total CBG ($\text{CBG} + 0.877 * \text{CBGa}$)

TOTAL THCV: ND

Total THCV ($\text{THCV} + 0.877 * \text{THCVa}$)

TOTAL CBC: ND

Total CBC ($\text{CBC} + 0.877 * \text{CBCa}$)

TOTAL CBDV: <LOQ

Total CBDV ($\text{CBDV} + 0.877 * \text{CBDVa}$)

CANNABINOID TEST RESULTS - 03/17/2021

| COMPOUND | LOD/LOQ (mg/g) | MEASUREMENT UNCERTAINTY (mg/g) | RESULT (mg/g) | RESULT (%) |
|----------------------------|----------------|--------------------------------|--------------------|----------------|
| CBD | 0.004 / 0.011 | ± 0.5038 | 10.517 | 1.0517 |
| CBDV | 0.002 / 0.012 | N/A | <LOQ | <LOQ |
| $\Delta 9\text{THC}$ | 0.002 / 0.014 | N/A | ND | ND |
| THCa | 0.001 / 0.005 | N/A | ND | ND |
| $\Delta 8\text{THC}$ | 0.01 / 0.02 | 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 CANNABINOIDS | | | 10.517 mg/g | 1.0517% |

Unit Mass: 1 grams per Unit

| | | | |
|-------------------------------|------------------------|----------------|------|
| $\Delta 9\text{THC}$ per Unit | 1120 per-package limit | ND | PASS |
| Total THC per Unit | | ND | |
| CBD per Unit | | 10.517 mg/unit | |
| Total CBD per Unit | | 10.517 mg/unit | |
| Sum of Cannabinoids per Unit | | 10.517 mg/unit | |
| Total Cannabinoids per Unit | | 10.517 mg/unit | |

MOISTURE TEST RESULT

Not Tested

DENSITY TEST RESULT

Not Tested

VISCOSITY TEST RESULT

Not Tested



 **Pesticide Analysis**

PLATING

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 - 03/22/2021  **PASS**

| COMPOUND | LOD/LOQ (µg/g) | ACTION LIMIT (µg/g) | MEASUREMENT UNCERTAINTY (µg/g) | RESULT (µg/g) | RESULT |
|---------------------|----------------|---------------------|--------------------------------|---------------|-------------|
| Aldicarb | | | | NT | |
| Carbofuran | | | | NT | |
| Chlordane* | | | | NT | |
| Chlorfenapyr* | | | | NT | |
| Chlorpyrifos | 0.02 / 0.06 | ≥ LOD | N/A | ND | PASS |
| 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 | |
| Paclobutrazol | | | | NT | |
| Propoxur | | | | NT | |
| Spiroxamine | | | | NT | |
| Thiacloprid | | | | NT | |

CATEGORY 2 PESTICIDE TEST RESULTS - 03/22/2021  **PASS**

| | | | | | |
|---------------------|-------------|-----|-----|-----------|-------------|
| Abamectin | 0.03 / 0.10 | 0.3 | N/A | ND | PASS |
| Acephate | | | | NT | |
| Acequinocyl | | | | NT | |
| Acetamiprid | | | | NT | |
| Azoxystrobin | 0.01 / 0.04 | 40 | N/A | ND | PASS |
| Bifenazate | 0.01 / 0.02 | 5 | N/A | ND | PASS |
| Bifenthrin | 0.01 / 0.02 | 0.5 | N/A | ND | PASS |
| Boscalid | 0.02 / 0.06 | 10 | N/A | ND | PASS |
| Captan | | | | NT | |
| Carbaryl | | | | NT | |
| Chlorantraniliprole | | | | NT | |

Continued on next page





Pesticide Analysis *Continued*

PLATING

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 - 03/22/2021 *continued* ✔ **PASS**

| COMPOUND | LOD/LOQ (µg/g) | ACTION LIMIT (µg/g) | MEASUREMENT UNCERTAINTY (µg/g) | RESULT (µg/g) | RESULT |
|--------------------------|----------------|---------------------|--------------------------------|---------------|--------|
| Clofentezine | | | | NT | |
| Cyfluthrin | | | | NT | |
| Cypermethrin | 0.1 / 0.3 | 1 | N/A | ND | PASS |
| Diazinon | | | | NT | |
| Dimethomorph | | | | NT | |
| Etoazole | 0.010 / 0.028 | 1.5 | N/A | ND | PASS |
| Fenhexamid | | | | NT | |
| Fenpyroximate | | | | NT | |
| Flonicamid | | | | NT | |
| Fludioxonil | | | | NT | |
| Hexythiazox | 0.01 / 0.04 | 2 | N/A | ND | PASS |
| Imidacloprid | 0.01 / 0.04 | 3 | N/A | ND | PASS |
| Kresoxim-methyl | | | | NT | |
| Malathion | 0.02 / 0.05 | 5 | N/A | ND | PASS |
| Metalaxyl | | | | NT | |
| Methomyl | | | | NT | |
| Myclobutanil | 0.03 / 0.1 | 9 | N/A | ND | PASS |
| Naled | | | | NT | |
| Oxamyl | | | | NT | |
| Pentachloronitrobenzene* | | | | NT | |
| Permethrin | 0.03 / 0.09 | 20 | N/A | ND | PASS |
| Phosmet | | | | NT | |
| Piperonylbutoxide | 0.003 / 0.009 | 8 | N/A | ND | PASS |
| Prallethrin | | | | NT | |
| Propiconazole | 0.01 / 0.03 | 20 | N/A | ND | PASS |
| Pyrethrins | | | | NT | |
| Pyridaben | | | | NT | |
| Spinetoram | | | | NT | |
| Spinosad | | | | NT | |
| Spiromesifen | 0.02 / 0.05 | 12 | N/A | ND | PASS |
| Spirotetramat | | | | NT | |
| Tebuconazole | 0.02 / 0.07 | 2 | N/A | ND | PASS |
| Thiamethoxam | | | | NT | |
| Trifloxystrobin | 0.01 / 0.03 | 30 | N/A | ND | PASS |



 **Residual Solvents Analysis**

PLATING

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 - 03/18/2021  **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 - 03/18/2021  **PASS**


| COMPOUND | LOD/LOQ (µg/g) | ACTION LIMIT (µg/g) | MEASUREMENT UNCERTAINTY (µg/g) | RESULT (µg/g) | RESULT |
|-------------------|----------------|---------------------|--------------------------------|---------------|--------|
| 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**

PLATING


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 - 03/17/2021  **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 |





**Microbial Impurities
Analysis**
PLATING

Analysis conducted by 3M™ Petrifilm™ and plate counts of microbial impurities.

Method: QSP 6794 - Plating with 3M™ Petrifilm™

MICROBIAL IMPURITIES TEST RESULTS (PLATING) - 03/19/2021 ND

| COMPOUND | RESULT (cfu/g) |
|----------------------|----------------|
| Aerobic Plate Count | ND |
| Total Yeast and Mold | ND |



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 CO₂ 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**

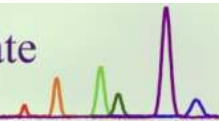
RESULT: PASS

| IDENTIFICATION | METHOD | RESULT |
|---|----------|--------|
| Cannabinoid | UPLC-PDA | %wt/wt |
| Cannabidiol (CBD) | UPLC-PDA | 99.16% |
| Cannabidiol (CBD) | UPLC-PDA | 99.16% |
| Cannabidiolic Acid (CBDA) | UPLC-PDA | N/D |
| Cannabinol (CBN) | UPLC-PDA | N/D |
| Δ -9-Tetrahydrocannabinol (Δ -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 |
| Δ -8-Tetrahydrocannabinol (Δ -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



Certificate ID: **67555**
 Client Sample ID: **190007AC**
 Lot Number: **190007AC**
 Matrix: **Isolates - CBD**

Received: **10/10/19**

Scan QR Code for authenticity



GenCanna

| | | |
|---|-----------------------------------|---------------------|
| Authorization: Jon Podgorni, Lead Research Chemist | Signature: <i>Jon Podgorni</i> | Date: 10/23/2019 |
|---|-----------------------------------|---------------------|



The data contained within this report was collected in accordance with the requirements of ISO/IEC17025:2017. I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

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 x 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

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. ¹ (µg/kg) | RL (µg/kg) | Limits ² (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 |
| Mo | Molybdenum | ND | 50 | 1,000 | PASS |
| Ni | Nickel | ND | 50 | 500 | PASS |
| P | 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.

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.

MB2: Pathogenic Bacterial Contaminants [WI-10-10]

Analyst: LabAdmin

Test Date: 10/12/2019

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-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.

MY: Mycotoxin Testing [WI-10-05]

Analyst: AKR

Test Date: 10/16/2019

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-MY

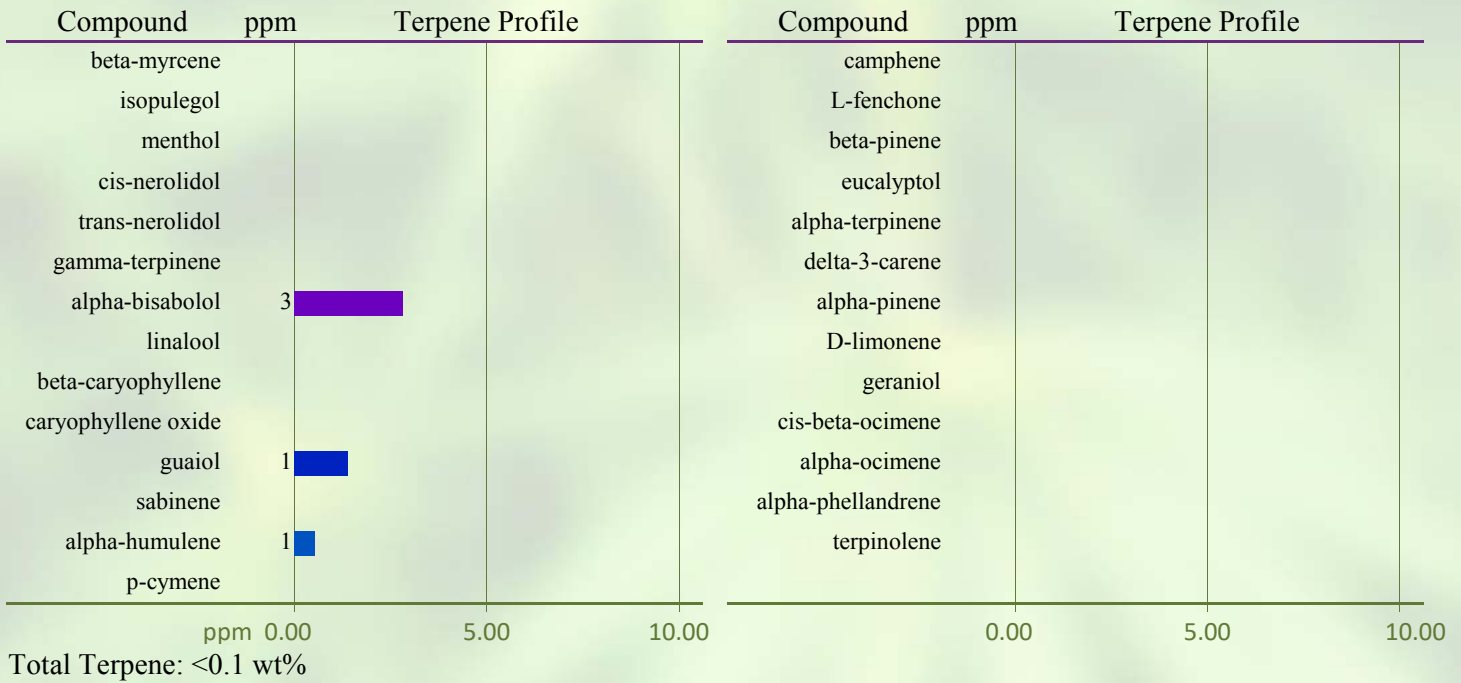
| Test ID | Date | Results | MDL | Limits | Status* |
|------------------|------------|---------|-------|----------|---------|
| Total Aflatoxin | 10/16/2019 | < MDL | 2 ppb | < 20 ppb | PASS |
| Total Ochratoxin | 10/16/2019 | < MDL | 3 ppb | < 20 ppb | PASS |

TP: Terpenes Profile [WI-10-27]

Analyst: CMA

Test Date: 10/15/2019

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. 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 ¹ | Limit ² | 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

Report Number: P193162
Report Date: October 24, 2019
Client Project ID:

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

Sample Date: 10/09/2019
Received Date: 10/10/2019
Extraction Date: 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 | Ethalfuralin | 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 | Pacllobutrazol | 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 | Quinoxifen | 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 | |



GenCanna Global
4274 Colby Rd.
Winchester, KY 40391

Report Number: P193162
Report Date: October 24, 2019
Client Project ID:

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

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 (GC-MS/MS) (Continued) | | | | | | | | | |
| 10/15/2019 | Trifluralin | ND | 0.20 | | | | | | |
| JASBC 69(3):121-126, 2011 (LC-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 | |
| 10/15/2019 | 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 | |
| 10/15/2019 | Imazalil | ND | 0.20 | | 10/15/2019 | Imidacloprid | ND | 0.20 | |



GenCanna Global
4274 Colby Rd.
Winchester, KY 40391

Report Number: P193162
Report Date: October 24, 2019
Client Project ID:

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

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-MS/MS) (Continued) | | | | | | | | | |
| 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 | Methoxyfenozone | 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 | |



GenCanna Global
4274 Colby Rd.
Winchester, KY 40391

Report Number: P193162
Report Date: October 24, 2019
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Sample Date: 10/09/2019
Received Date: 10/10/2019
Extraction Date: 10/14/2019

Notes and Definitions

| <u>Notes</u> | <u>Definition</u> |
|--------------|---|
| 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.
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