

SAMPLE NAME: R&R 25mg Full Spectrum + 5mg CBN Infused Sleep Gummy
Infused, Colorado Infused

CULTIVATOR / MANUFACTURER

Business Name:
License Number:
Address:

DISTRIBUTOR / TESTED FOR

Business Name: R&R CBD
License Number:
Address:

SAMPLE DETAIL

Batch Number: 2200S
Sample ID: 230517L013
Date of Sampling: 05/17/2023
Time of Sampling: 10:29 a.m.
Sampler Name:
Sampler Company:

Date Collected: 05/17/2023
Date Received: 05/17/2023
Batch Size:
Sample Size: 1.0 units
Unit Mass: 9.4978 grams per Unit
Serving Size: 9.4978 grams per Serving



Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY

Total THC: Not Detected


Total CBD: 27.002 mg/unit

Sum of Cannabinoids: 32.312 mg/unit

Total Cannabinoids: 32.312 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 = $(\Delta^9\text{-THC} + 0.877 \cdot \text{THCa}) + (\text{CBD} + 0.877 \cdot \text{CBDa}) + (\text{CBG} + 0.877 \cdot \text{CBGa}) + (\text{THCV} + 0.877 \cdot \text{THCVa}) + (\text{CBC} + 0.877 \cdot \text{CBCa}) + (\text{CBDV} + 0.877 \cdot \text{CBDVa}) + \Delta^8\text{-THC} + \text{CBL} + \text{CBN}$

SAFETY ANALYSIS - SUMMARY

Pesticides:  **PASS**

Mycotoxins:  **PASS**

Residual Solvents:  **PASS**

Heavy Metals:  **PASS**

Microbiology (PCR):  **PASS**

Microbiology (Plating):  **PASS**

For quality assurance purposes. Not a Regulatory 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: 6 CCR 1010-21 Colorado Wholesale Food, Industrial Hemp, and Shellfish Regulations; where applicable

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)



Approved by: Josh Wurzer
Job Title: Chief Compliance Officer
Date: 06/09/2023




Cannabinoïd Analysis

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 (Δ^9 -THC+0.877*THCa)

TOTAL CBD: **27.002 mg/unit**

Total CBD (CBD+0.877*CBDA)

TOTAL CANNABINOIDS: **32.312 mg/unit**

Total Cannabinoids (Total THC) + (Total CBD) + (Total CBG) + (Total THCV) + (Total CBC) + (Total CBDV) + Δ^8 -THC + CBL + CBN

TOTAL CBG: **0.104 mg/unit**

Total CBG (CBG+0.877*CBGa)

TOTAL THCV: **ND**

Total THCV (THCV+0.877*THCVa)

TOTAL CBC: **0.152 mg/unit**

Total CBC (CBC+0.877*CBCa)

TOTAL CBDV: **<LOQ**

Total CBDV (CBDV+0.877*CBDVa)

CANNABINOID TEST RESULTS - 05/19/2023

| COMPOUND | LOD/LOQ (mg/g) | MEASUREMENT UNCERTAINTY (mg/g) | RESULT (mg/g) | RESULT (%) |
|----------------------------|----------------|--------------------------------|-------------------|----------------|
| CBD | 0.004 / 0.011 | ±0.1060 | 2.843 | 0.2843 |
| CBN | 0.001 / 0.007 | ±0.0153 | 0.532 | 0.0532 |
| CBC | 0.003 / 0.010 | ±0.0005 | 0.016 | 0.0016 |
| CBG | 0.002 / 0.006 | ±0.0005 | 0.011 | 0.0011 |
| CBDV | 0.002 / 0.012 | N/A | <LOQ | <LOQ |
| Δ^9 -THC | 0.002 / 0.014 | N/A | ND | ND |
| Δ^8 -THC | 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 |
| CBGa | 0.002 / 0.007 | N/A | ND | ND |
| CBL | 0.003 / 0.010 | N/A | ND | ND |
| CBCa | 0.001 / 0.015 | N/A | ND | ND |
| Total THC | | N/A | ND | ND |
| SUM OF CANNABINOIDS | | | 3.402 mg/g | 0.3402% |

Unit Mass: 9.4978 grams per Unit / Serving Size: 9.4978 grams per Serving

| | |
|---------------------------------|-------------------|
| Δ^9 -THC per Unit | ND |
| Δ^9 -THC per Serving | ND |
| Total THC per Unit | ND |
| Total THC per Serving | ND |
| CBD per Unit | 27.002 mg/unit |
| CBD per Serving | 27.002 mg/serving |
| Total CBD per Unit | 27.002 mg/unit |
| Total CBD per Serving | 27.002 mg/serving |
| Sum of Cannabinoids per Unit | 32.312 mg/unit |
| Sum of Cannabinoids per Serving | 32.312 mg/serving |
| Total Cannabinoids per Unit | 32.312 mg/unit |
| Total Cannabinoids per Serving | 32.312 mg/serving |



Pesticide Analysis

PESTICIDE TEST RESULTS - 06/02/2023 ✔ PASS

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

| COMPOUND | LOD/LOQ (µg/g) | ACTION LIMIT (µg/g) | MEASUREMENT UNCERTAINTY (µg/g) | RESULT (µg/g) | RESULT |
|---------------------|----------------|---------------------|--------------------------------|---------------|--------|
| Abamectin | 0.032 / 0.097 | 0.25 | N/A | ND | PASS |
| Acephate | 0.006 / 0.018 | 0.05 | N/A | ND | PASS |
| Acequinocyl | 0.009 / 0.027 | ≥ LOQ | N/A | ND | PASS |
| Acetamiprid | 0.016 / 0.049 | 0.05 | N/A | ND | PASS |
| Aldicarb | 0.030 / 0.090 | 0.5 | N/A | ND | PASS |
| Allethrin | 0.030 / 0.092 | 0.1 | N/A | ND | PASS |
| Atrazine | 0.006 / 0.019 | ≥ LOQ | N/A | ND | PASS |
| Azadirachtin | 0.082 / 0.248 | 0.5 | N/A | ND | PASS |
| Azoxystrobin | 0.003 / 0.009 | 0.01 | N/A | ND | PASS |
| Benzovindiflupyr | 0.003 / 0.009 | 0.01 | N/A | ND | PASS |
| Bifenazate | 0.003 / 0.009 | 0.01 | N/A | ND | PASS |
| Bifenthrin | 0.021 / 0.064 | ≥ LOQ | N/A | ND | PASS |
| Boscalid | 0.003 / 0.009 | 0.01 | N/A | ND | PASS |
| Buprofezin | 0.006 / 0.019 | ≥ LOQ | N/A | ND | PASS |
| Carbaryl | 0.007 / 0.020 | 0.025 | N/A | ND | PASS |
| Carbofuran | 0.003 / 0.008 | 0.01 | N/A | ND | PASS |
| Chlorantraniliprole | 0.006 / 0.018 | ≥ LOQ | N/A | ND | PASS |
| Chlorfenapyr* | 0.005 / 0.015 | 1.5 | N/A | ND | PASS |
| Chlorpyrifos | 0.013 / 0.039 | 0.5 | N/A | ND | PASS |
| Clofentezine | 0.003 / 0.009 | 0.01 | N/A | ND | PASS |
| Clothianidin | 0.008 / 0.025 | 0.025 | N/A | ND | PASS |
| Coumaphos | 0.003 / 0.010 | 0.01 | N/A | ND | PASS |
| Cyantraniliprole | 0.003 / 0.010 | 0.01 | N/A | ND | PASS |
| Cyfluthrin | 0.052 / 0.159 | ≥ LOQ | N/A | ND | PASS |
| Cypermethrin | 0.051 / 0.153 | ≥ LOQ | N/A | ND | PASS |
| Cyprodinil | 0.003 / 0.008 | 0.01 | N/A | ND | PASS |
| Daminozide | 0.026 / 0.077 | ≥ LOQ | N/A | ND | PASS |
| Deltamethrin | 0.059 / 0.180 | ≥ LOQ | N/A | ND | PASS |
| Diazinon | 0.006 / 0.017 | ≥ LOQ | N/A | ND | PASS |
| Dichlorvos (DDVP) | 0.012 / 0.038 | 0.05 | N/A | ND | PASS |
| Dimethoate | 0.003 / 0.009 | 0.01 | N/A | ND | PASS |
| Dimethomorph | 0.016 / 0.050 | ≥ LOQ | N/A | ND | PASS |
| Dinotefuran | 0.010 / 0.030 | 0.05 | N/A | ND | PASS |
| Diuron | 0.013 / 0.040 | ≥ LOQ | N/A | ND | PASS |
| Dodemorph | 0.012 / 0.035 | ≥ LOQ | N/A | ND | PASS |
| Endosulfan sulfate | 0.016 / 0.048 | 2.5 | N/A | ND | PASS |
| Endosulfan-α* | 0.004 / 0.014 | 2.5 | N/A | ND | PASS |
| Endosulfan-β* | 0.006 / 0.019 | 2.5 | N/A | ND | PASS |
| Ethoprophos | 0.003 / 0.009 | 0.01 | N/A | ND | PASS |
| Etofenprox | 0.014 / 0.042 | ≥ LOQ | N/A | ND | PASS |
| Etoxazole | 0.007 / 0.020 | ≥ LOQ | N/A | ND | PASS |

Continued on next page



Pesticide Analysis *Continued*

PESTICIDE TEST RESULTS - 06/02/2023 *continued* ✔ PASS

| COMPOUND | LOD/LOQ (µg/g) | ACTION LIMIT (µg/g) | MEASUREMENT UNCERTAINTY (µg/g) | RESULT (µg/g) | RESULT |
|--------------------------|----------------|---------------------|--------------------------------|---------------|--------|
| Etridiazole* | 0.002 / 0.005 | 0.15 | N/A | ND | PASS |
| Fenhexamid | 0.003 / 0.008 | ≥ LOQ | N/A | ND | PASS |
| Fenoxycarb | 0.003 / 0.010 | 0.01 | N/A | ND | PASS |
| Fenpyroximate | 0.007 / 0.020 | ≥ LOQ | N/A | ND | PASS |
| Fensulfothion | 0.003 / 0.010 | 0.01 | N/A | ND | PASS |
| Fenthion | 0.003 / 0.010 | 0.01 | N/A | ND | PASS |
| Fenvalerate | 0.033 / 0.099 | ≥ LOQ | N/A | ND | PASS |
| Fipronil | 0.003 / 0.010 | 0.01 | N/A | ND | PASS |
| Flonicamid | 0.007 / 0.022 | 0.025 | N/A | ND | PASS |
| Fludioxonil | 0.003 / 0.010 | 0.01 | N/A | ND | PASS |
| Fluopyram | 0.003 / 0.009 | 0.01 | N/A | ND | PASS |
| Hexythiazox | 0.003 / 0.010 | ≥ LOQ | N/A | ND | PASS |
| Imazalil | 0.003 / 0.009 | 0.01 | N/A | ND | PASS |
| Imidacloprid | 0.003 / 0.010 | 0.01 | N/A | ND | PASS |
| Iprodione | 0.077 / 0.233 | 0.5 | N/A | ND | PASS |
| Kinoprene | 0.077 / 0.233 | 1.25 | N/A | ND | PASS |
| Kresoxim-methyl | 0.006 / 0.019 | 0.15 | N/A | ND | PASS |
| λ-Cyhalothrin | 0.068 / 0.206 | ≥ LOQ | N/A | ND | PASS |
| Malathion | 0.003 / 0.009 | 0.01 | N/A | ND | PASS |
| Metalaxyl | 0.003 / 0.010 | 0.01 | N/A | ND | PASS |
| Methiocarb | 0.003 / 0.008 | 0.01 | N/A | ND | PASS |
| Methomyl | 0.008 / 0.025 | 0.025 | N/A | ND | PASS |
| Methoprene | 0.172 / 0.521 | ≥ LOQ | N/A | ND | PASS |
| Mevinphos | 0.008 / 0.024 | 0.025 | N/A | ND | PASS |
| MGK-264 | 0.015 / 0.047 | ≥ LOQ | N/A | ND | PASS |
| Myclobutanil | 0.003 / 0.009 | 0.01 | N/A | ND | PASS |
| Naled | 0.021 / 0.064 | ≥ LOQ | N/A | ND | PASS |
| Novaluron | 0.002 / 0.005 | 0.025 | N/A | ND | PASS |
| Oxamyl | 0.017 / 0.051 | 1.5 | N/A | ND | PASS |
| Paclobutrazol | 0.003 / 0.010 | 0.01 | N/A | ND | PASS |
| Parathion-methyl | 0.016 / 0.050 | ≥ LOQ | N/A | ND | PASS |
| Pentachloronitrobenzene* | 0.004 / 0.012 | ≥ LOQ | N/A | ND | PASS |
| Permethrin | 0.056 / 0.168 | ≥ LOQ | N/A | ND | PASS |
| Phenothrin | 0.016 / 0.047 | ≥ LOQ | N/A | ND | PASS |
| Phosmet | 0.007 / 0.020 | ≥ LOQ | N/A | ND | PASS |
| Piperonyl Butoxide | 0.010 / 0.029 | 1.25 | N/A | ND | PASS |
| Pirimicarb | 0.003 / 0.009 | 0.01 | N/A | ND | PASS |
| Prallethrin | 0.015 / 0.046 | ≥ LOQ | N/A | ND | PASS |
| Propiconazole | 0.027 / 0.080 | ≥ LOQ | N/A | ND | PASS |
| Propoxur | 0.003 / 0.008 | 0.01 | N/A | ND | PASS |
| Pyraclostrobin | 0.003 / 0.010 | 0.01 | N/A | ND | PASS |

Continued on next page



Pesticide Analysis *Continued*

PESTICIDE TEST RESULTS - 06/02/2023 *continued* ✔ **PASS**

| COMPOUND | LOD/LOQ (µg/g) | ACTION LIMIT (µg/g) | MEASUREMENT UNCERTAINTY (µg/g) | RESULT (µg/g) | RESULT |
|--------------------|----------------|---------------------|--------------------------------|---------------|--------|
| Pyrethrins | 0.016 / 0.049 | ≥ LOQ | N/A | ND | PASS |
| Pyridaben | 0.005 / 0.017 | 0.02 | N/A | ND | PASS |
| Pyriproxyfen | 0.003 / 0.009 | ≥ LOQ | N/A | ND | PASS |
| Resmethrin | 0.013 / 0.039 | 0.05 | N/A | ND | PASS |
| Spinetoram | 0.003 / 0.010 | 0.01 | N/A | ND | PASS |
| Spinosad | 0.003 / 0.010 | 0.01 | N/A | ND | PASS |
| Spirodiclofen | 0.031 / 0.093 | ≥ LOQ | N/A | ND | PASS |
| Spiromesifen | 0.016 / 0.050 | ≥ LOQ | N/A | ND | PASS |
| Spirotetramat | 0.003 / 0.010 | 0.01 | N/A | ND | PASS |
| Spiroxamine | 0.020 / 0.062 | ≥ LOQ | N/A | ND | PASS |
| Tebuconazole | 0.003 / 0.010 | 0.01 | N/A | ND | PASS |
| Tebufozide | 0.003 / 0.008 | 0.01 | N/A | ND | PASS |
| Teflubenzuron | 0.007 / 0.022 | 0.025 | N/A | ND | PASS |
| Tetrachlorvinphos | 0.003 / 0.008 | 0.01 | N/A | ND | PASS |
| Tetramethrin | 0.021 / 0.063 | ≥ LOQ | N/A | ND | PASS |
| Thiabendazole | 0.006 / 0.020 | ≥ LOQ | N/A | ND | PASS |
| Thiacloprid | 0.003 / 0.009 | 0.01 | N/A | ND | PASS |
| Thiamethoxam | 0.003 / 0.010 | 0.01 | N/A | ND | PASS |
| Thiophanate-methyl | 0.013 / 0.040 | ≥ LOQ | N/A | ND | PASS |
| Trifloxystrobin | 0.003 / 0.009 | 0.01 | N/A | ND | PASS |



Mycotoxin Analysis

MYCOTOXIN TEST RESULTS - 05/31/2023 ✔ **PASS**

Mycotoxin analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS).

Method: QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS

| COMPOUND | LOD/LOQ (µg/kg) | ACTION LIMIT (µg/kg) | MEASUREMENT UNCERTAINTY (µg/kg) | RESULT (µg/kg) | RESULT |
|-----------------|-----------------|----------------------|---------------------------------|----------------|--------|
| Aflatoxin B1 | 1.6 / 5.0 | 5 | N/A | ND | PASS |
| Aflatoxin B2 | 1.4 / 4.1 | | N/A | ND | |
| Aflatoxin G1 | 1.6 / 4.9 | | N/A | ND | |
| Aflatoxin G2 | 1.6 / 5.0 | | N/A | ND | |
| Total Aflatoxin | | 20 | | ND | PASS |
| Ochratoxin A | 1.6 / 5.0 | 5 | N/A | ND | PASS |



Residual Solvents Analysis

Residual Solvent analysis utilizing gas chromatography-mass spectrometry (GC-MS).

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

Total Butanes = n-Butane + 2-Methylpropane (Isobutane)
Total Heptanes = 2,2-Dimethylpentane (Neoheptane) + 2,3-Dimethylpentane + 2,4-Dimethylpentane + 3,3-Dimethylpentane + 2,2,3-Trimethylbutane (Triptane) + 2-Methylhexane (Isoheptane) + 3-Methylhexane + 3-Ethylpentane + n-Heptane
Total Xylenes = 1,2-Dimethylbenzene (o-Xylene) + 1,3-Dimethylbenzene (m-Xylene) / 1,4-Dimethylbenzene (p-Xylene)

RESIDUAL SOLVENTS TEST RESULTS - 06/05/2023

| COMPOUND | LOD/LOQ (µg/g) | ACTION LIMIT (µg/g) | MEASUREMENT UNCERTAINTY (µg/g) | RESULT (µg/g) | RESULT |
|---|----------------|---------------------|--------------------------------|---------------|--------|
| Propane | 0.234 / 0.781 | 1000 | N/A | ND | PASS |
| 2-Methylpropane (Isobutane) | 0.052 / 0.173 | | N/A | ND | |
| n-Butane | 0.019 / 0.063 | | N/A | ND | |
| Total Butanes | | 1000 | | ND | PASS |
| n-Pentane | 0.310 / 1.033 | 1000 | N/A | ND | PASS |
| n-Hexane | 0.110 / 0.366 | 60 | N/A | ND | PASS |
| 2,2-Dimethylpentane (Neoheptane) | 0.493 / 1.642 | | N/A | ND | |
| 2,3-Dimethylpentane | 1.009 / 3.365 | | N/A | ND | |
| 2,4-Dimethylpentane | 0.737 / 2.458 | | N/A | ND | |
| 3,3-Dimethylpentane | 0.198 / 0.660 | | N/A | ND | |
| 2,2,3-Trimethylbutane (Triptane) | 0.521 / 1.738 | | N/A | ND | |
| 2-Methylhexane (Isoheptane) | 0.610 / 2.034 | | N/A | ND | |
| 3-Methylhexane | 0.235 / 0.785 | | N/A | ND | |
| 3-Ethylpentane | 0.304 / 1.012 | | N/A | ND | |
| n-Heptane | 13.12 / 43.72 | | N/A | ND | |
| Total Heptanes | | 1000 | | ND | PASS |
| Benzene | 0.089 / 0.295 | 2 | N/A | ND | PASS |
| Toluene | 0.115 / 0.382 | 180 | N/A | ND | PASS |
| 1,3-Dimethylbenzene / 1,4-Dimethylbenzene | 0.451 / 1.502 | | N/A | ND | |
| 1,2-Dimethylbenzene (o-Xylene) | 0.387 / 1.289 | | N/A | ND | |
| Total Xylenes | | 430 | | ND | PASS |
| Methanol | 53.92 / 163.4 | 600 | N/A | ND | PASS |
| Ethanol | 8.984 / 27.23 | 1000 | N/A | <LOQ | PASS |
| 2-Propanol (Isopropyl Alcohol) | 8.421 / 25.52 | 1000 | ±0.536 | 37.24 | PASS |
| Acetone | 10.59 / 32.08 | 1000 | N/A | ND | PASS |
| Ethyl Acetate | 1.123 / 3.745 | 1000 | 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 - 05/31/2023

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



Microbiology Analysis



PCR AND PLATING

Analysis conducted by polymerase chain reaction (PCR) and fluorescence detection of microbiological contaminants.

Method: QSP 1221 - Analysis of Microbiological Contaminants

Analysis conducted by 3M™ Petrifilm™ and plate counts of microbiological contaminants.

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

MICROBIOLOGY TEST RESULTS (PCR) - 06/03/2023 ✔ PASS

| COMPOUND | ACTION LIMIT | RESULT | RESULT |
|---|--------------------|--------|--------|
| Shiga toxin-producing <i>Escherichia coli</i> | Not Detected in 1g | ND | PASS |
| <i>Salmonella</i> spp. | Not Detected in 1g | ND | PASS |

MICROBIOLOGY TEST RESULTS (PLATING) - 06/03/2023 ✔ PASS

| COMPOUND | ACTION LIMIT (cfu/g) | RESULT (cfu/g) | RESULT |
|------------------------|----------------------|----------------|--------|
| Total Aerobic Bacteria | 10000 | ND | PASS |
| Total Yeast and Mold | 1000 | ND | PASS |
| Coliforms | 100 | ND | PASS |

NOTES

COA amended, update to results. COA amended to reflect requested assays.