

Figure S2. Certificate of Analysis for placebo product



# Hemp Quality Assurance Testing CERTIFICATE OF ANALYSIS

DATE ISSUED 11/08/2021

SAMPLE NAME: cbdMD Tincture Canine Peanut Butter 1500 mg Placebo  
Infused, Hemp Infused

## CULTIVATOR / MANUFACTURER

Business Name:  
License Number:  
Address:

## DISTRIBUTOR / TESTED FOR

Business Name: Paw CBD  
License Number:  
Address:

## SAMPLE DETAIL

Batch Number: CBD-014.1  
Sample ID: 211104M037

Date Collected: 11/04/2021  
Date Received: 11/04/2021  
Batch Size:  
Sample Size: 1.0 units  
Unit Mass:  
Serving Size: 1 milliliters per Serving



Scan QR code to verify  
authenticity of results.

## CANNABINOID ANALYSIS - SUMMARY

Total THC: **Not Detected**

Total CBD: **Not Detected**

Sum of Cannabinoids: Not Detected

Total Cannabinoids: Not Detected

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

Density: 0.9468 g/mL

## SAFETY ANALYSIS - SUMMARY

Pesticides: **PASS**

Heavy Metals: **PASS**

Foreign Material: **PASS**

Mycotoxins: **PASS**

Microbiology (PCR): **PASS**

Residual Solvents: **PASS**

Microbiology (Plating): **PASS**

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: Action Limits used in this report are a compilation of guidance from state regulatory agencies in all states. Action limits for required tests are either state-specific, or the lower of any conflicting state regulations based upon the panel requested.

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)

LQC verified by: Randy Vuong  
Date: 11/08/2021

Approved by: Josh Wurzer, President  
Date: 11/08/2021


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

**TOTAL CBD: Not Detected**

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

**TOTAL CANNABINOIDS: Not Detected**

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 ( $\text{CBG} + 0.877 \cdot \text{CBGa}$ )

**TOTAL THCV: ND**

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

**TOTAL CBC: ND**

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

**TOTAL CBDV: ND**

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

**CANNABINOID TEST RESULTS - 11/06/2021**

| COMPOUND                   | LOD/LOQ (mg/mL) | MEASUREMENT UNCERTAINTY (mg/mL) | RESULT (mg/mL) | RESULT (%) |
|----------------------------|-----------------|---------------------------------|----------------|------------|
| $\Delta 9\text{THC}$       | 0.002 / 0.014   | N/A                             | ND             | ND         |
| $\Delta 8\text{THC}$       | 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         |
| CBD                        | 0.004 / 0.011   | N/A                             | ND             | ND         |
| CBDa                       | 0.001 / 0.026   | N/A                             | ND             | ND         |
| CBDV                       | 0.002 / 0.012   | 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         |
| <b>SUM OF CANNABINOIDS</b> |                 |                                 | <b>ND</b>      | <b>ND</b>  |

Serving Size: 1 milliliters per Serving

|                                  |    |
|----------------------------------|----|
| $\Delta 9\text{THC}$ per Serving | ND |
| Total THC per Serving            | ND |
| CBD per Serving                  | ND |
| Total CBD per Serving            | ND |
| Sum of Cannabinoids per Serving  | ND |
| Total Cannabinoids per Serving   | ND |

**DENSITY TEST RESULT**

**0.9468 g/mL**

Tested 11/06/2021

**Method:** QSP 7870 - Sample Preparation





## Pesticide Analysis

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

*Exclusions<sup>1</sup> see last page*

*Exclusions<sup>2</sup> see last page*

### PESTICIDE TEST RESULTS - 11/06/2021 PASS

| COMPOUND            | LOD/LOQ (µg/g) | ACTION LIMIT (µg/g) | MEASUREMENT UNCERTAINTY (µg/g) | RESULT (µg/g) | RESULT |
|---------------------|----------------|---------------------|--------------------------------|---------------|--------|
| 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   |
| Aldicarb            | 0.03 / 0.08    | ≥ LOD               | 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   |
| Carbofuran          | 0.02 / 0.05    | ≥ LOD               | N/A                            | ND            | PASS   |
| Chlorantraniliprole | 0.04 / 0.12    | 40                  | 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   |
| Clofentezine        | 0.03 / 0.09    | 0.5                 | N/A                            | ND            | PASS   |
| Coumaphos           | 0.02 / 0.07    | ≥ LOD               | N/A                            | ND            | PASS   |
| Cyfluthrin          | 0.12 / 0.38    | 1                   | N/A                            | ND            | PASS   |
| Cypermethrin        | 0.11 / 0.32    | 1                   | 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   |
| Diazinon            | 0.02 / 0.05    | 0.2                 | N/A                            | ND            | PASS   |
| Dimethoate          | 0.03 / 0.08    | ≥ LOD               | N/A                            | ND            | PASS   |
| Dimethomorph        | 0.03 / 0.09    | 20                  | 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   |
| Etoxazole           | 0.02 / 0.06    | 1.5                 | N/A                            | ND            | PASS   |
| Fenhexamid          | 0.03 / 0.09    | 10                  | N/A                            | ND            | PASS   |
| Fenoxycarb          | 0.03 / 0.08    | ≥ LOD               | N/A                            | ND            | PASS   |
| Fenpyroximate       | 0.02 / 0.06    | 2                   | N/A                            | ND            | PASS   |
| Fipronil            | 0.03 / 0.08    | ≥ LOD               | 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   |
| Imazalil            | 0.02 / 0.06    | ≥ LOD               | 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   |
| Methiocarb          | 0.02 / 0.07    | ≥ LOD               | N/A                            | ND            | PASS   |

Continued on next page





## Pesticide Analysis *Continued*

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

## PESTICIDE TEST RESULTS - 11/06/2021 *continued* ✔ PASS

| COMPOUND                 | LOD/LOQ (µg/g) | ACTION LIMIT (µg/g) | MEASUREMENT UNCERTAINTY (µg/g) | RESULT (µg/g) | RESULT |
|--------------------------|----------------|---------------------|--------------------------------|---------------|--------|
| Methomyl                 | 0.03 / 0.10    | 0.1                 | 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   |
| 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   |
| Paclobutrazol            | 0.02 / 0.05    | ≥ LOD               | 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   |
| Propoxur                 | 0.03 / 0.09    | ≥ LOD               | 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   |
| Spiroxamine              | 0.03 / 0.08    | ≥ LOD               | N/A                            | ND            | PASS   |
| Tebuconazole             | 0.02 / 0.07    | 2                   | N/A                            | ND            | PASS   |
| Thiacloprid              | 0.03 / 0.10    | ≥ LOD               | 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   |



## Mycotoxin Analysis

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

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

*Exclusions<sup>3</sup> see last page*

## MYCOTOXIN TEST RESULTS - 11/06/2021 ✔ PASS

| COMPOUND        | LOD/LOQ (µg/kg) | ACTION LIMIT (µg/kg) | MEASUREMENT UNCERTAINTY (µg/kg) | RESULT (µg/kg) | RESULT |
|-----------------|-----------------|----------------------|---------------------------------|----------------|--------|
| Aflatoxin B1    | 2.0 / 6.0       |                      | N/A                             | ND             |        |
| Aflatoxin B2    | 1.8 / 5.6       |                      | N/A                             | ND             |        |
| Aflatoxin G1    | 1.0 / 3.1       |                      | N/A                             | ND             |        |
| Aflatoxin G2    | 1.2 / 3.5       |                      | N/A                             | ND             |        |
| Total Aflatoxin |                 | 20                   |                                 | ND             | PASS   |
| Ochratoxin A    | 6.3 / 19.2      | 20                   | 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

*Exclusions<sup>4</sup> see last page*

### RESIDUAL SOLVENTS TEST RESULTS - 11/06/2021 ✓ PASS

| COMPOUND           | LOD/LOQ (µg/g) | ACTION LIMIT (µg/g) | MEASUREMENT UNCERTAINTY (µg/g) | RESULT (µg/g) | RESULT |
|--------------------|----------------|---------------------|--------------------------------|---------------|--------|
| Propane            | 10 / 20        | 5000                | N/A                            | ND            | PASS   |
| Butane             | 10 / 50        | 5000                | N/A                            | ND            | PASS   |
| Pentane            | 20 / 50        | 5000                | N/A                            | ND            | PASS   |
| Hexane             | 2 / 5          | 290                 | N/A                            | ND            | PASS   |
| Heptane            | 20 / 60        | 5000                | N/A                            | ND            | PASS   |
| Benzene            | 0.03 / 0.09    | 1                   | N/A                            | ND            | PASS   |
| Toluene            | 7 / 21         | 890                 | N/A                            | ND            | PASS   |
| Total Xylenes      | 50 / 160       | 2170                | N/A                            | ND            | PASS   |
| Methanol           | 50 / 200       | 3000                | N/A                            | ND            | PASS   |
| Ethanol            | 20 / 50        | 5000                | ± 26.1                         | 687           | PASS   |
| Isopropyl Alcohol  | 10 / 40        | 5000                | N/A                            | ND            | PASS   |
| Acetone            | 20 / 50        | 5000                | N/A                            | ND            | PASS   |
| Ethyl ether        | 20 / 50        | 5000                | N/A                            | ND            | PASS   |
| Ethylene Oxide     | 0.3 / 0.8      | 1                   | N/A                            | ND            | PASS   |
| Ethyl acetate      | 20 / 60        | 5000                | N/A                            | ND            | PASS   |
| Chloroform         | 0.1 / 0.2      | 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   |
| 1,2-Dichloroethane | 0.05 / 0.1     | 1                   | N/A                            | ND            | PASS   |
| Acetonitrile       | 2 / 7          | 410                 | 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 - 11/05/2021 ✓ PASS

| COMPOUND | LOD/LOQ (µg/g) | ACTION LIMIT (µg/g) | MEASUREMENT UNCERTAINTY (µg/g) | RESULT (µg/g) | RESULT |
|----------|----------------|---------------------|--------------------------------|---------------|--------|
| Arsenic  | 0.02 / 0.1     | 0.42                | N/A                            | ND            | PASS   |
| Cadmium  | 0.02 / 0.05    | 0.27                | N/A                            | ND            | PASS   |
| Lead     | 0.04 / 0.1     | 0.5                 | N/A                            | ND            | PASS   |
| Mercury  | 0.002 / 0.01   | 0.4                 | 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

### MICROBIOLOGY TEST RESULTS (PCR) - 11/08/2021 ✓ 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   |
| <i>Listeria monocytogenes</i>                 | Not Detected in 1g | ND     | PASS   |




**Microbiology Analysis** *Continued*
**PCR AND PLATING**

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

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

**MICROBIOLOGY TEST RESULTS (PLATING) - 11/08/2021** ✔ PASS

| COMPOUND               | ACTION LIMIT (cfu/g) | RESULT (cfu/g) | RESULT |
|------------------------|----------------------|----------------|--------|
| Total Aerobic Bacteria | 100                  | ND             | PASS   |
| Total Yeast and Mold   | 10                   | ND             | PASS   |


**Foreign Material Analysis**

Visual analysis includes, but is not limited to, sand, soil, cinders, dirt, mold, hair, insect fragments, and mammalian excreta.

**Method:** QSP 1226 - Analysis of Foreign Material in Cannabis and Cannabis Products

**FOREIGN MATERIAL TEST RESULTS - 11/05/2021** ✔ PASS

| COMPOUND                                                  | ACTION LIMIT    | RESULT |
|-----------------------------------------------------------|-----------------|--------|
| Total Sample Area Covered by Sand, Soil, Cinders, or Dirt | >25%            | PASS   |
| Total Sample Area Covered by Mold                         | >25%            | PASS   |
| Total Sample Area Covered by an Imbedded Foreign Material | >25%            | PASS   |
| Insect Fragment Count                                     | > 1 per 3 grams | PASS   |
| Hair Count                                                | > 1 per 3 grams | PASS   |
| Mammalian Excreta Count                                   | > 1 per 3 grams | PASS   |

**NOTES**

- Exclusions: QSP 1213 - Sample Certification: California Code of Regulation Title 4 Division 19
- Exclusions: QSP 1212 - Sample Certification: California Code of Regulation Title 4 Division 19
- Exclusions: Sample Certification: California Code of Regulation Title 4 Division 19
- Exclusions: Sample Certification: California Code of Regulation Title 4 Division 19

