

Hemp Quality Assurance Testing

CERTIFICATE OF ANALYSIS

DATE ISSUED 05/01/2022

SAMPLE NAME: 1500mg Gummies (50mg)

Infused, Hemp Infused

CULTIVATOR / MANUFACTURER

Business Name: License Number:

Address:

SAMPLE DETAIL

Batch Number: 220029 Sample ID: 220425N006 **DISTRIBUTOR / TESTED FOR**

Business Name: cbdMD License Number:

Address:

Date Collected: 04/25/2022 Date Received: 04/25/2022

Batch Size:

Sample Size: 1.0 units

Unit Mass: 127.359 grams per Unit Serving Size: 4.2453 grams per Serving





Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY

Total THC/CBD is calculated using the following formulas to take into **Total THC: Not Detected** account the loss of a carboxyl group during the decarboxylation step:

Total THC = Δ^9 -THC + (THCa (0.877)) Total CBD: 1820.979 mg/unit

Total CBD = CBD + (CBDa (0.877))

Sum of Cannabinoids = Δ^9 -THC + THCa + CBD + CBDa + CBG + CBGa + Sum of Cannabinoids: 1855.748 mg/unit THCV + THCVa + CBC + CBCa + CBDV + CBDVa + Δ^8 -THC + CBL + CBN Total Cannabinoids = $(\Delta^9$ -THC+0.877*THCa) + (CBD+0.877*CBDa) + (CBG+0.877*CBGa) + (THCV+0.877*THCVa) + (CBC+0.877*CBCa) +

Total Cannabinoids: 1855.748 mg/unit $(CBDV+0.877*CBDVa) + \Delta^{8}-THC + CBL + CBN$

TERPENOID ANALYSIS - SUMMARY

39 TESTED, TOP 3 HIGHLIGHTED

Total Terpenoids: 0.0132%

Limonene 0.132 mg/g

SAFETY ANALYSIS - SUMMARY

Pesticides: PASS Mycotoxins: PASS Residual Solvents: PASS

Heavy Metals: PASS Microbiology (PCR): PASS Microbiology (Plating): PASS

Foreign Material: PASS Water Activity: 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

Sample Certification: Action Limits used in this report are a compilation of guidance from state regulatory agencies in all states except Alaska. Action limits for required tests are the lower of any conflicting state regulations.

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 (LOO), not detected (ND), not tested (NT). too numerous to count >250 cfu/plate (TNTC), colony-forming unit (cfu)

verified by Lisi Johnson oved by: Josh Wurzer, President



Hemp Quality Assurance Testing

CERTIFICATE OF ANALYSIS

1500MG GUMMIES (50MG) | DATE ISSUED 05/01/2022





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 (Δ^9 -THC+0.877*THCa)

TOTAL CBD: 1820.979 mg/unit

Total CBD (CBD+0.877*CBDa)

TOTAL CANNABINOIDS: 1855.748 mg/unit

 $\begin{array}{l} Total \ Cannabinoids \ (Total \ THC) + (Total \ CBD) + \\ (Total \ CBG) + (Total \ THCV) + (Total \ CBC) + \\ (Total \ CBDV) + \Delta^8 - THC + CBL + CBN \end{array}$

TOTAL CBG: 16.684 mg/unit

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 (CBDV+0.877*CBDVa)

TOTAL CBDV: 5.222 mg/unit

CANNABINOID TEST RESULTS - 04/28/2022

	COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
	CBD	0.004 / 0.011	±0.5333	14.298	1.4298
	CBG	0.002 / 0.006	±0.0064	0.131	0.0131
	CBN	0.001 / 0.007	±0.0029	0.101	0.0101
	CBDV	0.002 / 0.012	±0.0017	0.041	0.0041
	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
it -	THCVa	0.002/0.019	N/A	ND	ND
111	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
	СВС	0.003 / 0.010	N/A	ND	ND
	CBCa	0.001 / 0.015	N/A	ND	ND
	SUM OF CANNAB	INOIDS		14.571 mg/g	1.4571%

Unit Mass: 127.359 grams per Unit / Serving Size: 4.2453 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	1820.979 mg/un	it
CBD per Serving	60.699 mg/servir	g
Total CBD per Unit	1820.979 mg/un	it
Total CBD per Serving	60.699 mg/servir	g
Sum of Cannabinoids per Unit	1855.748 mg/un	it
Sum of Cannabinoids per Serving	61.858 mg/servir	g
Total Cannabinoids per Unit	1855.748 mg/un	it
Total Cannabinoids per Serving	61.858 mg/servir	g



Hemp Quality Assurance Testing CERTIFICATE OF ANALYSIS

1500MG GUMMIES (50MG) | DATE ISSUED 05/01/2022





Terpenoid Analysis

Terpene analysis utilizing gas chromatographyflame ionization detection (GC-FID).

Method: QSP 1192 - Analysis of Terpenoids by GC-FID



Limonene

A monoterpene with a fragrance that can be described as orangey, citrusy, sweet and tart. It is most commonly found in nature as D-Limonene and is a primary contributor to the distinct scent of orange peels, from which it is commonly derived. Found in numerous pines, red maple, silver maple, aspens, cottonwoods, hemlocks, sumac, cedar, junipers...etc.

TERPENOID TEST RESULTS - 04/28/2022

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
Limonene	0.005 / 0.016	±0.0015	0.132	0.0132
α-Pinene	0.005 / 0.017	N/A	ND	ND
Camphene	0.005 / 0.015	N/A	ND	ND
Sabinene	0.004 / 0.014	N/A	ND	ND
β-Pinene	0.004 / 0.014	N/A	ND	ND
Myrcene	0.008 / 0.025	N/A	ND	ND
α-Phellandrene	0.006 / 0.020	N/A	ND	ND
Δ ³ -Carene	0.005 / 0.018	N/A	ND	ND
α-Terpinene	0.005 / 0.017	N/A	ND	ND
p-Cymene	0.005 / 0.016	N/A	ND	ND
Eucalyptol	0.006 / 0.018	N/A	ND	ND
β-Ocimene	0.006 / 0.020	N/A	ND	ND
γ-Terpinene	0.006 / 0.018	N/A	ND	ND
Sabinene Hydrate	0.006 / 0.022	N/A	ND	ND
Fenchone	0.009 / 0.028	N/A	ND	ND
Terpinolene	0.008 / 0.026	N/A	ND	ND
Linalool	0.009/0.032	N/A	ND	ND
Fenchol	0.010 / 0.034	N/A	ND	ND
Isopulegol	0.005 / 0.016	N/A	ND	ND
Camphor	0.006 / 0.019	N/A	ND	ND
Isoborneol	0.004 / 0.012	N/A	ND	ND
Borneol	0.005 / 0.016	N/A	ND	ND
Menthol	0.008 / 0.025	N/A	ND	ND
Terpineol	0.009 / 0.031	N/A	ND	ND
Nerol	0.003 / 0.011	N/A	ND	ND
Citronellol	0.003 / 0.010	N/A	ND	ND
Pulegone	0.003 / 0.011	N/A	ND	ND
Geraniol	0.002 / 0.007	N/A	ND	ND
Geranyl Acetate	0.004 / 0.014	N/A	ND	ND
α-Cedrene	0.005 / 0.016	N/A	ND	ND
β-Caryophyllene	0.004 / 0.012	N/A	ND	ND
trans-β-Farnesene	0.008 / 0.025	N/A	ND	ND
α-Humulene	0.009/0.029	N/A	ND	ND
Valencene	0.009 / 0.030	N/A	ND	ND
Nerolidol	0.006 / 0.019	N/A	ND	ND
Caryophyllene Oxide	0.010 / 0.033	N/A	ND	ND
Guaiol	0.009 / 0.030	N/A	ND	ND
Cedrol	0.008 / 0.027	N/A	ND	ND
α-Bisabolol	0.008 / 0.026	N/A	ND	ND
TOTAL TERPENOIDS			0.132 mg/g	0.0132%



Hemp Quality Assurance Testing CERTIFICATE OF ANALYSIS

1500MG GUMMIES (50MG) | DATE ISSUED 05/01/2022





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

Exclusions¹ see last page

Exclusions² see last page

PESTICIDE TEST RESULTS - 04/27/2022 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
Diazinon	0.02 / 0.05	0.2	N/A	ND	PASS
Dichlorvos (DDVP)	0.03 / 0.09	≥LOD	N/A	ND	PASS
Dimethoate	0.03 / 0.08	≥LOD	N/A	ND	PASS
Dimethomorph	0.03 / 0.09	20	N/A	ND	PASS
Ethoprophos	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



Hemp Quality Assurance Testing CERTIFICATE OF ANALYSIS

1500MG GUMMIES (50MG) | DATE ISSUED 05/01/2022





Pesticide Analysis Continued

PESTICIDE TEST RESULTS - 04/27/2022 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
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
Parathion-methyl	0.03 / 0.10	≥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
Piperonyl Butoxide	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

Exclusions³ see last page

MYCOTOXIN TEST RESULTS - 04/27/2022 **⊘** 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



Hemp Quality Assurance Testing CERTIFICATE OF ANALYSIS

1500MG GUMMIES (50MG) | DATE ISSUED 05/01/2022





Residual Solvents Analysis

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

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

Exclusions⁴ see last page

RESIDUAL SOLVENTS TEST RESULTS - 04/28/2022 **⊘** PASS

	COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (µg/g)	RESULT
Ī	Propane	10/20	5000	N/A	ND	PASS
	n-Butane	10/50	5000	N/A	ND	PASS
	n-Pentane	20/50	5000	N/A	ND	PASS
Ī	n-Hexane	2/5	290	N/A	ND	PASS
Ī	n-Heptane	20/60	5000	N/A	ND	PASS
	Benzene	0.03 / 0.09	1	N/A	ND	PASS
Ī	Toluene	7/21	890	N/A	ND	PASS
Ī	Total Xylenes	50 / 160	2170	N/A	ND	PASS
	Methanol	50/200	3000	N/A	ND	PASS
Ī	Ethanol	20/50	5000	±3.4	117	PASS
	2-Propanol (Isopropyl Alcohol)	10 / 40	5000	N/A	ND	PASS
Ī	Acetone	20/50	5000	N/A	ND	PASS
Ī	Ethyl Ether	20/50	5000	N/A	ND	PASS
	Ethylene Oxide	0.3 / 0.8	1	N/A	ND	PASS
Ī	Ethyl Acetate	20/60	5000	N/A	ND	PASS
Ī	Chloroform	0.1 / 0.2	1	N/A	ND	PASS
	Dichloromethane (Methylene Chloride)	0.3/0.9	1	N/A	ND	PASS
	Trichloroethylene	0.1 / 0.3	1	N/A	ND	PASS
4	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 - 04/26/2022 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) - 04/30/2022 PASS

COMPOUND	ACTION LIMIT	RESULT	RESULT
Shiga toxin-producing Escherichia coli	Not Detected in 1g	ND	PASS
Salmonella spp.	Not Detected in 1g	ND	PASS
Listeria monocytogenes	Not Detected in 1g	ND	PASS





1500MG GUMMIES (50MG) | DATE ISSUED 05/01/2022





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

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

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	- 04/26/2022 🕢	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



Water Activity Analysis

Method: QSP 1227 - Analysis of Water Activity in Cannabis and Cannabis Products

WATER ACTIVITY TEST RESULTS - 04/26/2022 PASS

COMPOUND	ACTION LIMIT (Aw)	MEASUREMENT UNCERTAINTY (Aw)	RESULT (Aw)	RESULT
Water Activity	0.86	±0.02957	0.6071	PASS

NOTES

Farm Bill Compliant: Product contains a total Δ9-tetrahydrocannabinol content that does not exceed 0.3%

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