

SAMPLE NAME: pawcbd Tincture Canine Calming 500 mg

Infused, Hemp Infused

CULTIVATOR / MANUFACTURER

Business Name:

License Number:

Address:

DISTRIBUTOR / TESTED FOR

Business Name: Paw CBD

License Number:

Address:

SAMPLE DETAIL

Batch Number: 11531J2

Sample ID: 210623M002

Date Collected: 06/23/2021

Date Received: 06/23/2021

Batch Size:

Sample Size: 1.0 units

Unit Mass: 30 milliliters per Unit

Serving Size: 1 milliliters per Serving



Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY

Total THC: **Not Detected**

Total CBD: **522.480 mg/unit**

Sum of Cannabinoids: **533.400 mg/unit**

Total Cannabinoids: **533.400 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 = $\Delta 9\text{THC} + (\text{THCa} (0.877))$
 Total CBD = $\text{CBD} + (\text{CBDA} (0.877))$
 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 = $(\Delta 9\text{THC} + 0.877 * \text{THCa}) + (\text{CBD} + 0.877 * \text{CBDA}) + (\text{CBG} + 0.877 * \text{CBGa}) + (\text{THCV} + 0.877 * \text{THCVa}) + (\text{CBC} + 0.877 * \text{CBCa}) + (\text{CBDV} + 0.877 * \text{CBDVa}) + \Delta 8\text{THC} + \text{CBL} + \text{CBN}$

Density: 0.9461 g/mL

SAFETY ANALYSIS - SUMMARY

Pesticides: ND

Mycotoxins: ND

Residual Solvents: DETECTED

Heavy Metals: ND

Microbiology (PCR): ND

Microbiology (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: 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: Josh Antunovich
 Date: 06/29/2021


 Approved by: Josh Wurzer, President
 Date: 06/29/2021



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 ($\Delta 9$ THC+0.877*THCa)

TOTAL CBD: 522.480 mg/unit

Total CBD (CBD+0.877*CBDA)

TOTAL CANNABINOIDS: 533.400 mg/unit

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

TOTAL CBG: 6.900 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: 1.440 mg/unit

Total CBDV (CBDV+0.877*CBDVa)

CANNABINOID TEST RESULTS - 06/24/2021

COMPOUND	LOD/LOQ (mg/mL)	MEASUREMENT UNCERTAINTY (mg/mL)	RESULT (mg/mL)	RESULT (%)
CBD	0.004 / 0.011	±0.8342	17.416	1.8408
CBG	0.002 / 0.006	±0.0143	0.230	0.0243
CBN	0.001 / 0.007	±0.0032	0.086	0.0091
CBDV	0.002 / 0.012	±0.0025	0.048	0.0051
$\Delta 9$ THC	0.002 / 0.014	N/A	ND	ND
THCa	0.001 / 0.005	N/A	ND	ND
$\Delta 8$ 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
CBGa	0.002 / 0.007	N/A	ND	ND
CBL	0.003 / 0.010	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			17.780 mg/mL	1.8793%

Unit Mass: 30 milliliters per Unit / Serving Size: 1 milliliters per Serving

$\Delta 9$ THC per Unit	ND
$\Delta 9$ THC per Serving	ND
Total THC per Unit	ND
Total THC per Serving	ND
CBD per Unit	522.480 mg/unit
CBD per Serving	17.416 mg/serving
Total CBD per Unit	522.480 mg/unit
Total CBD per Serving	17.416 mg/serving
Sum of Cannabinoids per Unit	533.400 mg/unit
Sum of Cannabinoids per Serving	17.780 mg/serving
Total Cannabinoids per Unit	533.400 mg/unit
Total Cannabinoids per Serving	17.780 mg/serving

DENSITY TEST RESULT

0.9461 g/mL

Tested 06/24/2021

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

PESTICIDE TEST RESULTS - 06/24/2021 ND

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)
Abamectin	0.032 / 0.097	0.07	N/A	ND
Acephate	0.006 / 0.018	0.05	N/A	ND
Acequinocyl	0.009 / 0.027	0.03	N/A	ND
Acetamiprid	0.016 / 0.049	0.05	N/A	ND
Aldicarb	0.030 / 0.090	0.1	N/A	ND
Allethrin	0.030 / 0.092	0.1	N/A	ND
Atrazine	0.006 / 0.019	0.025	N/A	ND
Azadirachtin	0.082 / 0.248	0.5	N/A	ND
Azoxystrobin	0.003 / 0.009	0.01	N/A	ND
Benzovindiflupyr	0.003 / 0.009	0.01	N/A	ND
Bifenazate	0.003 / 0.009	0.01	N/A	ND
Bifenthrin	0.021 / 0.064	0.2	N/A	ND
Boscalid	0.003 / 0.009	0.01	N/A	ND
Buprofezin	0.006 / 0.019	0.02	N/A	ND
Captan	0.045 / 0.135	3	N/A	ND
Carbaryl	0.007 / 0.020	0.025	N/A	ND
Carbofuran	0.003 / 0.008	0.01	N/A	ND
Chlorantraniliprole	0.006 / 0.018	0.02	N/A	ND
Chlordane*	0.005 / 0.107	0.1	N/A	ND
Chlorfenapyr*	0.005 / 0.015	0.1	N/A	ND
Chlormequat chloride	0.022 / 0.066	3	N/A	ND
Chlorpyrifos	0.013 / 0.039	0.04	N/A	ND
Clofentezine	0.003 / 0.009	0.01	N/A	ND
Clothianidin	0.008 / 0.025	0.025	N/A	ND
Coumaphos	0.003 / 0.010	0.01	N/A	ND
Cyantraniliprole	0.003 / 0.010	0.01	N/A	ND
Cyfluthrin	0.052 / 0.159	0.1	N/A	ND
Cypermethrin	0.051 / 0.153	0.3	N/A	ND
Cyprodinil	0.026 / 0.080	0.01	N/A	ND
Daminozide	0.026 / 0.077	0.1	N/A	ND
DDVP (Dichlorvos)	0.012 / 0.038	0.1	N/A	ND
Deltamethrin	0.059 / 0.180	0.5	N/A	ND
Diazinon	0.006 / 0.017	0.02	N/A	ND
Dimethoate	0.003 / 0.009	0.1	N/A	ND
Dimethomorph	0.016 / 0.050	0.05	N/A	ND
Dinotefuran	0.010 / 0.030	0.05	N/A	ND
Diuron	0.013 / 0.040	0.125	N/A	ND
Dodemorph	0.012 / 0.035	0.05	N/A	ND
Endosulfan sulfate	0.016 / 0.048	0.05	N/A	ND
Endosulfan-alpha*	0.004 / 0.014	0.2	N/A	ND
Endosulfan-beta*	0.006 / 0.019	0.05	N/A	ND

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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 - 06/24/2021 *continued ND*

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)
Ethoprop(hos)	0.003 / 0.009	0.01	N/A	ND
Etofenprox	0.014 / 0.042	0.05	N/A	ND
Etozazole	0.007 / 0.020	0.01	N/A	ND
Etridiazole*	0.002 / 0.005	0.03	N/A	ND
Fenhexamid	0.003 / 0.008	0.125	N/A	ND
Fenoxycarb	0.003 / 0.010	0.01	N/A	ND
Fenpyroximate	0.007 / 0.020	0.2	N/A	ND
Fensulfothion	0.003 / 0.010	0.01	N/A	ND
Fenthion	0.003 / 0.010	0.01	N/A	ND
Fenvalerate	0.033 / 0.099	0.1	N/A	ND
Fipronil	0.003 / 0.010	0.01	N/A	ND
Flonicamid	0.007 / 0.022	0.025	N/A	ND
Fludioxonil	0.003 / 0.010	0.01	N/A	ND
Fluopyram	0.003 / 0.009	0.01	N/A	ND
Hexythiazox	0.003 / 0.010	0.01	N/A	ND
Imazalil	0.003 / 0.009	0.01	N/A	ND
Imidacloprid	0.003 / 0.010	0.01	N/A	ND
Iprodione	0.077 / 0.233	0.5	N/A	ND
Kinoprene	0.077 / 0.233	0.5	N/A	ND
Kresoxim-methyl	0.006 / 0.019	0.02	N/A	ND
Malathion	0.003 / 0.009	0.02	N/A	ND
Metalaxyl	0.003 / 0.010	0.02	N/A	ND
Methiocarb	0.003 / 0.008	0.02	N/A	ND
Methomyl	0.008 / 0.025	0.05	N/A	ND
Methoprene	0.172 / 0.521	2	N/A	ND
Methyl parathion	0.016 / 0.050	0.05	N/A	ND
Mevinphos	0.008 / 0.024	0.025	N/A	ND
MGK-264	0.015 / 0.047	0.05	N/A	ND
Myclobutanil	0.003 / 0.009	0.01	N/A	ND
Naled	0.021 / 0.064	0.1	N/A	ND
Novaluron	0.002 / 0.005	0.025	N/A	ND
Oxamyl	0.017 / 0.051	0.5	N/A	ND
Paclobutrazol	0.003 / 0.010	0.01	N/A	ND
Pentachloronitrobenzene*	0.004 / 0.012	0.02	N/A	ND
Permethrin	0.056 / 0.168	0.04	N/A	ND
Phenothrin	0.016 / 0.047	0.05	N/A	ND
Phosmet	0.007 / 0.020	0.02	N/A	ND
Piperonylbutoxide	0.010 / 0.029	0.2	N/A	ND
Pirimicarb	0.015 / 0.046	0.01	N/A	ND
Prallethrin	0.003 / 0.009	0.05	N/A	ND
Propiconazole	0.027 / 0.080	0.1	N/A	ND

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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 - 06/24/2021 *continued ND*

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)
Propoxur	0.003 / 0.008	0.01	N/A	ND
Pyraclostrobin	0.003 / 0.010	0.01	N/A	ND
Pyrethrins	0.016 / 0.049	0.05	N/A	ND
Pyridaben	0.005 / 0.017	0.02	N/A	ND
Pyriproxyfen	0.003 / 0.009	0.01	N/A	ND
Resmethrin	0.013 / 0.039	0.05	N/A	ND
Spinetoram	0.004 / 0.014	0.01	N/A	ND
Spinosad	0.004 / 0.012	0.01	N/A	ND
Spirodiclofen	0.031 / 0.093	0.25	N/A	ND
Spiromesifen	0.016 / 0.050	0.03	N/A	ND
Spirotetramat	0.003 / 0.010	0.01	N/A	ND
Spiroxamine	0.020 / 0.062	0.1	N/A	ND
Tebuconazole	0.003 / 0.010	0.01	N/A	ND
Tebufozide	0.003 / 0.008	0.01	N/A	ND
Teflubenzuron	0.007 / 0.022	0.025	N/A	ND
Tetrachlorvinphos	0.003 / 0.008	0.01	N/A	ND
Tetramethrin	0.021 / 0.063	0.1	N/A	ND
Thiabendazole	0.006 / 0.020	0.02	N/A	ND
Thiacloprid	0.003 / 0.009	0.01	N/A	ND
Thiamethoxam	0.003 / 0.010	0.01	N/A	ND
Thiophanate-methyl	0.013 / 0.040	0.05	N/A	ND
Trifloxystrobin	0.003 / 0.009	0.02	N/A	ND



Mycotoxin Analysis

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

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

MYCOTOXIN TEST RESULTS - 06/24/2021 ND

COMPOUND	LOD/LOQ (µg/kg)	ACTION LIMIT (µg/kg)	MEASUREMENT UNCERTAINTY (µg/kg)	RESULT (µg/kg)
Aflatoxin B1	2.0 / 6.0	5	N/A	ND
Aflatoxin B2	1.8 / 5.6	20	N/A	ND
Aflatoxin G1	1.0 / 3.1	20	N/A	ND
Aflatoxin G2	1.2 / 3.5	20	N/A	ND
Total Aflatoxin		20		ND
Ochratoxin A	6.3 / 19.2	5	N/A	ND



 **Residual Solvents Analysis**

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

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

RESIDUAL SOLVENTS TEST RESULTS - 06/27/2021 DETECTED

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)
Propane	0.133 / 0.445	500	N/A	ND
Butane	0.042 / 0.141	2000	±0.0378	0.466
Methylpropane	0.04 / 0.133	5000	N/A	ND
Total Butanes		500		0.466
2-Methylbutane	0.065 / 0.216	5000	±0.6496	4.037
2,2-Dimethylpropane	0.181 / 0.604		N/A	ND
Pentane	0.181 / 0.604	1000	±0.4592	4.032
Total Pentanes		500		8.069
2,2-Dimethylbutane	0.147 / 0.488	290	N/A	ND
2,3-Dimethylbutane 2-Methylpentane	0.375 / 1.249	290	N/A	ND
3-Methylpentane	0.075 / 0.251	290	N/A	ND
Hexane	0.054 / 0.181	ND	N/A	ND
Total Hexanes		290		ND
Cyclohexane	0.091 / 0.302	500	N/A	ND
Heptane	0.153 / 0.511	500	N/A	ND
Benzene	0.066 / 0.221	ND	N/A	ND
Toluene	0.074 / 0.246	ND	N/A	ND
Cumene	0.31 / 1.033	70	N/A	ND
1,2-Dimethylbenzene	0.239 / 0.797	2170	N/A	ND
1,3-Dimethylbenzene 1,4-Dimethylbenzene	0.213 / 0.71	2170	N/A	ND
Ethylbenzene	0.176 / 0.586	2170	N/A	ND
Total Xylenes	0.320 / 1.067	217	N/A	ND
Methanol	0.018 / 0.061	500	N/A	ND
Ethanol	0.129 / 0.429	1000	±0.4019	5.316
1-Propanol	0.528 / 1.759	5000	N/A	ND
Isopropyl Alcohol	0.064 / 0.214	500	±0.2618	2.864
1-Butanol	0.17 / 0.565	5000	N/A	ND
2-Butanol	0.535 / 1.784	5000	N/A	ND
1-Pentanol	0.379 / 1.262		N/A	ND
Acetone	0.083 / 0.277	5000	±0.5119	6.336
2-Butanone	0.193 / 0.642	5000	N/A	ND
Tetrahydrofuran	0.22 / 0.735	720	N/A	ND
Ethyl ether	0.1 / 0.335	5000	N/A	ND
Ethylene Glycol	31.104 / 103.68	620	N/A	ND
2-Ethoxyethanol	1.08 / 3.599	160	N/A	ND
1,2-Dimethoxyethane	1.093 / 3.645	100	N/A	ND
1,4-Dioxane	0.379 / 1.265	380	N/A	ND
Ethylene Oxide	0.05 / 0.166	5	N/A	ND
Ethyl acetate	0.29 / 0.967	1000	N/A	ND
Isopropyl Acetate	0.346 / 1.153	5000	N/A	ND

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 **Residual Solvents Analysis**
Continued

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

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

RESIDUAL SOLVENTS TEST RESULTS - 06/27/2021 *continued* **DETECTED**

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)
Chloroform	0.1 / 0.2	1	N/A	ND
Methylene chloride	0.114 / 0.381	600	N/A	ND
Trichloroethylene	0.1 / 0.3	80	N/A	ND
1,2-Dichloroethane	0.05 / 0.1	5	N/A	ND
Sulfolane	11.728 / 39.094	160	N/A	ND
Dimethyl Sulfoxide	1.679 / 5.596	5	N/A	ND
Acetonitrile	0.049 / 0.164	0.41	±0.0107	0.203
Pyridine	0.118 / 0.394	0.2	N/A	ND
N,N-Dimethylacetamide	0.2 / 0.668	1.09	N/A	ND
N,N-Dimethylformamide	0.335 / 1.116	880	N/A	ND

 **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 - 06/23/2021 **ND**

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)
Arsenic	0.02 / 0.1	0.00014	N/A	ND
Cadmium	0.02 / 0.05	0.00009	N/A	ND
Lead	0.04 / 0.1	0.00029	N/A	ND
Mercury	0.002 / 0.01	0.00029	N/A	ND

 **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) - 06/27/2021 **ND**

COMPOUND	ACTION LIMIT	RESULT
Shiga toxin-producing <i>Escherichia coli</i>	Not Detected in 25g	ND
<i>Salmonella</i> spp.	Detect	ND
<i>Listeria monocytogenes</i>	Detect	ND

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

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

MICROBIOLOGY TEST RESULTS (PLATING) - 06/27/2021 **ND**

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

