

# CERTIFICATE OF ANALYSIS

**PRODUCT NAME:** Organic Delta 9 THC Tincture (Citrus)  
**PRODUCT STRENGTH:** 900mg CBD + 75mg THC per bottle  
**TINCTURE BATCH:** 241111G  
**BEST BY DATE:** 11/11/2024  
**HEMP EXTRACT LOT:** 606

## Physical Attributes


Test	Method	Specification	Results
Color	Internal	Golden to Amber	PASS
Odor	Internal	Characteristic - Coconut and Hemp - Citrus	PASS
Appearance	Internal	Golden to Amber oil in brown glass bottle with dropper.	PASS
Primary Package Eval.	Internal	Container clean and free of filth. Container caps tight and shrink bands intact	PASS
Secondary Package Eval.	Internal	Labeling Compliance Checked, Cartons sturdy and clean. Sufficient cushion material exists. Box taped and secure.	PASS

## Review of Third-Party Analysis

Panel	Method	Specification	Results*	Pass/Fail
<b>Potency - Total CBD</b>	HPLC-UV DAD	*NLT (product strength) mg / bottle	<b>1198mg</b>	PASS
<b>Potency - D9-THC</b>	HPLC-UV DAD	LOQ: 10 ppm (.001-0.3%)	<b>77mg</b>	PASS
<b>Expanded Pesticide Panel</b>	HPLC-QQQ	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	<b>ND</b>	PASS
<b>Microbial</b> Escherichia coli (STEC)	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	<b>Below LOQ</b>	PASS
<b>Microbial</b> Salmonella	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	<b>Below LOQ</b>	PASS
<b>Microbial</b> Yeast and Mold	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 <sup>2</sup> CFU/gram	<b>Below LOQ</b>	PASS
<b>Microbial</b> Total Coliforms*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 <sup>2</sup> CFU/gram	<b>Below LOQ</b>	PASS
<b>Microbial</b> Total Aerobic Count*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 <sup>3</sup> CFU/gram	<b>Below LOQ</b>	PASS
<b>Heavy Metals Panel</b>	ICP-MS	Arsenic (As): ≤1.5 ppm Cadmium (Cd): ≤0.5 ppm Lead (Pb): ≤0.5 ppm Mercury (Hg): ≤1.5 ppm	<b>ND</b>	PASS
<b>Mycotoxins</b>	ICP-MS	Total Aflatoxins <20 ppb† Aflatoxin B1 < 5 ppb Ochratoxin < 5ppb	<b>ND</b>	PASS
<b>Residual Solvents</b>	GC-HS-MSD	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	<b>ND</b>	PASS

\* \*Level of Quantitation, † Parts Per  
 Million † Part Per Billion CFU/g=Colony  
 Forming Units per Gram  
 \*Nothing Less Than  
 10<sup>2</sup>=100 CFU  
 10<sup>3</sup>=1,000 CFU

Quality Certified

  
 Name

12/5/2024

Date

**Organic Full Spectrum Tincture- Citrus**

Batch ID or Lot Number:241111G	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 1 of 5
Reported: <b>28Mar2023</b>	Started: 27Mar2023	Received: 24Mar2023	



**Cannabinoids - Colorado  
Compliance**

Test ID: T000239188

Methods: TM14 (HPLC-DAD): Potency – Standard

Cannabinoid Analysis

	LOD (%)	LOQ (%)	Result (%)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.007	0.020	0.028	0.28	
Cannabichromenic Acid (CBCA)	0.006	0.019	ND	ND	
Cannabidiol (CBD)	0.020	0.054	4.032	40.32	
Cannabidiolic Acid (CBDA)	0.020	0.056	ND	ND	
Cannabidivarin (CBDV)	0.005	0.013	0.018	0.18	
Cannabidivarinic Acid (CBDVA)	0.009	0.023	ND	ND	
Cannabigerol (CBG)	0.004	0.012	0.041	0.41	
Cannabigerolic Acid (CBGA)	0.017	0.049	ND	ND	
Cannabinol (CBN)	0.005	0.015	0.026	0.26	
Cannabinolic Acid (CBNA)	0.011	0.033	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.020	0.058	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.018	0.053	0.262	2.62	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.016	0.047	ND	ND	
Tetrahydrocannabivarin (THCV)	0.004	0.011	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.014	0.041	ND	ND	
<b>Total Cannabinoids</b>			<b>4.407</b>	<b>44.07</b>	
Total Potential THC			0.262	2.62	
Total Potential CBD			4.032	40.32	

**Final Approval**  
Sam Smith  
28Mar2023  
08:52:00 AM MDT  
PREPARED BY / DATE  
Karen Winternheimer  
28Mar2023  
08:56:00 AM MDT  
APPROVED BY / DATE

## Organic Full Spectrum Tincture- Citrus

Batch ID or Lot Number:241111G

Test, Test ID and Methods:  
Various

Matrix:  
Concentrate

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Reported:  
**28Mar2023**

Started:  
27Mar2023

Received:  
24Mar2023

## Pesticides

Test ID: T000239189

Methods: TM17

(LC-QQ LC MS/MS)

**Dynamic Range (ppb)**

**Result (ppb)**

Abamectin	374 - 2672	ND
Acephate	18 - 2844	ND
Acetamiprid	40 - 2758	ND
Azoxystrobin	45 - 2727	ND
Bifenazate	41 - 2784	ND
Boscalid	66 - 2638	ND
Carbaryl	43 - 2727	ND
Carbofuran	42 - 2705	ND
Chlorantraniliprole	42 - 2649	ND
Chlorpyrifos	55 - 2672	ND
Clofentezine	293 - 2709	ND
Diazinon	289 - 2767	ND
Dichlorvos	274 - 2725	ND
Dimethoate	40 - 2753	ND
E-Fenpyroximate	287 - 2726	ND
Etofenprox	48 - 2703	ND
Etoxazole	306 - 2700	ND
Fenoxycarb	43 - 2757	ND
Fipronil	39 - 2784	ND
Flonicamid	42 - 2787	ND
Fludioxonil	333 - 2624	ND
Hexythiazox	45 - 2742	ND
Imazalil	289 - 2748	ND
Imidacloprid	40 - 2751	ND
Kresoxim-methyl	43 - 2817	ND

**Dynamic Range (ppb)**

**Result (ppb)**

Malathion	279 - 2740	ND
Metalaxyl	44 - 2755	ND
Methiocarb	40 - 2669	ND
Methomyl	42 - 2802	ND
MGK 264 1	175 - 1559	ND
MGK 264 2	119 - 1122	ND
Myclobutanil	47 - 2696	ND
Naled	50 - 2695	ND
Oxamyl	44 - 2792	ND
Paclobutrazol	49 - 2706	ND
Permethrin	261 - 2620	ND
Phosmet	40 - 2745	ND
Prophos	296 - 2692	ND
Propoxur	40 - 2711	ND
Pyridaben	311 - 2711	ND
Spinosad A	34 - 2208	ND
Spinosad D	54 - 492	ND
Spiromesifen	284 - 2702	ND
Spirotetramat	276 - 2790	ND
Spiroxamine 1	19 - 1142	ND
Spiroxamine 2	24 - 1509	ND
Tebuconazole	274 - 2734	ND
Thiacloprid	43 - 2751	ND
Thiamethoxam	44 - 2778	ND
Trifloxystrobin	40 - 2722	ND

## Final Approval



Karen Winterheimer  
30Mar2023  
12:35:00 PM MDT

PREPARED BY / DATE



Sam Smith  
30Mar2023  
12:51:00 PM MDT

APPROVED BY / DATE

**Organic Full Spectrum Tincture- Citrus**

Batch ID or Lot Number: 241111G	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 3 of 5
Reported: <b>28Mar2023</b>	Started: 27Mar2023	Received: 24Mar2023	

**Residual Solvents -  
Colorado Compliance**


Test ID: T000239192

Methods: TM04 (GC-MS): Residual

Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	108 - 2166	ND	
Butanes (Isobutane, n-Butane)	221 - 4430	ND	
Methanol	65 - 1306	ND	
Pentane	109 - 2173	ND	
Ethanol	106 - 2110	ND	
Acetone	105 - 2107	ND	
Isopropyl Alcohol	108 - 2159	ND	
Hexane	6 - 126	ND	
Ethyl Acetate	106 - 2124	ND	
Benzene	0.2 - 4.4	ND	
Heptanes	107 - 2141	ND	
Toluene	19 - 373	ND	
Xylenes (m,p,o-Xylenes)	132 - 2646	ND	

**Final Approval**Karen Winternheimer  
30Mar2023  
03:04:00 PM MDT

PREPARED BY / DATE

Sam Smith  
30Mar2023  
03:07:00 PM MDT

APPROVED BY / DATE

**Organic Full Spectrum Tincture- Citrus**

Batch ID or Lot Number:241111G	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 4 of 5
Reported: <b>28Mar2023</b>	Started: 27Mar2023	Received: 24Mar2023	

**Microbial  
Contaminants -  
Colorado Compliance**

Test ID: T000239190

Methods: TM25 (qPCR) TM24, TM26,

TM27 (Culture Plating): Microbial

(Colorado Panel)

	Method	LOD	Quantitation Range	Result	Notes
STEC	TM25: PCR	10 <sup>0</sup> CFU/25g	NA	Absent	Free from visual mold, mildew, and foreign matter
<i>Salmonella</i>	TM25: PCR	10 <sup>0</sup> CFU/25g	NA	Absent	
Total Yeast and Mold*	TM24: Culture Plating	10 <sup>1</sup> CFU/g	1.0x10 <sup>2</sup> - 1.5x10 <sup>4</sup>	None Detected	
Total Aerobic Count*	TM26: Culture Plating	10 <sup>2</sup> CFU/g	1.0x10 <sup>3</sup> - 1.5x10 <sup>5</sup>	None Detected	
Total Coliforms*	TM27: Culture Plating	10 <sup>1</sup> CFU/g	1.0x10 <sup>2</sup> - 1.5x10 <sup>4</sup>	None Detected	

**Final Approval**Eden Thompson-Wright  
01Apr2023  
09:30:00 AM MDTBrianne Maillot  
02Apr2023  
02:52:00 PM MDT

PREPARED BY / DATE

APPROVED BY / DATE

**Mycotoxins - Colorado  
Compliance**

Test ID: T000239193

Methods: TM18 (UHPLC-QQQ

LCMS/MS): Mycotoxins

	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	2.52 - 132.57	ND	N/A
Aflatoxin B1	0.96 - 33.29	ND	
Aflatoxin B2	0.93 - 32.86	ND	
Aflatoxin G1	1.06 - 32.83	ND	
Aflatoxin G2	0.96 - 32.66	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	

**Final Approval**Sam Smith  
05Apr2023  
11:49:00 AM MDTKaren Winternheimer  
05Apr2023  
11:51:00 AM MDT

PREPARED BY / DATE

APPROVED BY / DATE

**Organic Full Spectrum Tincture- Citrus**

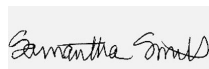
Batch ID or Lot Number:241111G	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 5 of 5
Reported: <b>28Mar2023</b>	Started: 27Mar2023	Received: 24Mar2023	

**Heavy Metals -  
Colorado Compliance**

Test ID: T000239191

Methods: TM19 (ICP-MS): Heavy

Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.04 - 4.06	ND	
Cadmium	0.05 - 4.56	ND	
Mercury	0.04 - 4.27	ND	
Lead	0.05 - 4.52	ND	

**Final Approval**Sam Smith  
05Apr2023  
03:03:00 PM MDT

PREPARED BY / DATE

Karen Winternheimer  
05Apr2023  
03:31:00 PM MDT

APPROVED BY / DATE

<https://results.botanacor.com/api/v1/coas/uuid/88c26460-9cbd-4d5f-b7d9-be422325e044>**Definitions**

LOD = Limit of Detection, ULOQ = Upper Limit of Quantitation, LLOQ = Lower Limit of Quantitation, PPB = Parts per Billion, % = % (w/w) = Percent (weight of analyte / weight of product). ND = None Detected (defined by dynamic range of the method). Total Potential Delta 9-THC or CBD is calculated to take into account the loss of a carboxyl group during decarboxylation step, using the following formulas: Total Potential Delta 9-THC = Delta 9-THC + (Delta 9-THCa  $\times$  (0.877)) and Total CBD = CBD + (CBDa  $\times$  (0.877)). Fail equates to a concentration level of Delta 9-THC, on a dry weight basis, higher than 0.3 percent + or - the measurement uncertainty. Total Potential THC is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step. Total THC = THC + (THCa  $\times$  (0.877)). ALOQ = Above Limit Of Quantitation (defined by dynamic range of the method), CFU/g = Colony Forming Units per Gram. Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form. Examples:  $10^2$  = 100 CFU,  $10^3$  = 1,000 CFU,  $10^4$  = 10,000 CFU,  $10^5$  = 100,000 CFU.

Testing results are based solely upon the sample submitted to SC Laboratories, Inc., in the condition it was received. SC Laboratories, Inc., warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of SC Laboratories, Inc. ISO/IEC 17025:2017 Accredited by A2LA. Some tests listed on this COA may not be within our scope of A2LA accreditation. Please visit [A2LA for more details](#).

Cert #4329.02  
88c264609cbd4d5fb7d9be422325e044.1

Certificate of Analysis  
Compliance TestBatch # 241111G  
Batch Date: 2024-11-11  
Extracted From: hemp

Test Reg State: Colorado

Order # PRO241115-040001  
Order Date: 2024-11-15  
Sample # AAGD628Sampling Date: 2024-11-18  
Lab Batch Date: 2024-11-18  
Completion Date: 2024-11-22

Initial Gross Weight: 236.100 g

Pathogenic  
PassedMicrobiology Petrifilm  
Passed

Product Image

## Pathogenic SE (qPCR) - CO

Specimen Weight: 25.200 g

Dilution Factor: 1.000

Analyte	Result (cfu/g)	Analyte
E.Coli	Passed	Salmonella

Passed  
SOP13.029  
(qPCR)Result  
(cfu/g)  
Passed

## Microbiology (Petrifilm) - CO

Specimen Weight: 991.700 mg

Dilution Factor: 1.000

Analyte	LOQ (cfu/g)	Action Limit (cfu/g)	Result (cfu/g)	Analyte	LOQ (cfu/g)	Action Limit (cfu/g)	Result (cfu/g)
Aerobic Bacteria	10	10000	<10	Yeast/Mold	10	1000	<10
Total Coliform	10	100	<10				

Passed  
SOP13.003  
(Petrifilm)Aixa Sun Lab Director/Principal Scientist  
D.H.Sc., M.Sc., B.Sc., MT (AAB)

Definitions and Abbreviations used in this report: Total Active CBD = CBD + (CBD-A \* 0.877), \*Total CBDV = CBDV + (CBDVA \* 0.867), Total Active THC = THCA-A \* 0.877 + Delta 9 THC, Total THC = THCV + (THCVA \* 0.87), CBG Total = (CBGA \* 0.878) + CBG, CBN Total = (CBNA \* 0.876) + CBN, Total CBC = CBC + (CBCA \* 0.877), Total THC-O-Acetate = Delta 8 THC-O-Acetate + Delta 9 THC-O-Acetate, Total THCP = Delta8-THCP + Delta9-THCP, Total Cannabinoids = Total percentage of cannabinoids within the sample. (mg/ml) = Milligrams per Milliliter, LOQ = Limit of Quantitation, LOD = Limit of Detection, Dilution = Dilution Factor, (ppb) = Parts per Billion, (%) = Percent, (cfu/g) = Colony Forming Unit per Gram, (µg/g) = Microgram per Gram, (ppm) = Parts per Million, (ppm) = (µg/g), (aw) = Water Activity, (mg/Kg) = Milligram per Kilogram. ACS uses simple acceptance criteria. Passed - Analyte/microbe is not detected or is at the level below the action limit per CO rule 6 CCR 1010-21. Failed - Analyte/microbe is at the level that equal or above the action limit per CO rule 6 CCR 1010-21 Sample not received via laboratory sampling.

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