

# CERTIFICATE OF ANALYSIS

**PRODUCT NAME:** Organic CBD Tincture - Natural  
**PRODUCT STRENGTH:** 900mg  
**TINCTURE BATCH:** 240830B  
**BEST BY DATE:** 8/30/26  
**HEMP EXTRACT LOT:** 240830B

### Physical Attributes

Test	Method	Specification	Results
Color	Internal	Golden to Amber	PASS
Odor	Internal	Characteristic - Olive and Hemp	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>1018mg</b>	PASS
<b>Potency - D9-THC</b>	HPLC-UV DAD	LOQ: 10 ppm (.001-0.3%)	<b>ND</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>Absent</b>	PASS
<b>Microbial</b> Salmonella	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	<b>Absent</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† Afltoxin 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



9/10/24

Quality Certified

Name

Date



**Certificate of Analysis**  
Compliance Test

Batch # 240830B  
Batch Date: 2024-08-16  
Extracted From: N/A

Test Reg State: Colorado

Production Date: 2024-08-16

Order # PRO240816-020001  
Order Date: 2024-08-16  
Sample # AAFW153

Sampling Date: 2024-08-21  
Lab Batch Date: 2024-08-21  
Completion Date: 2024-08-27

Initial Gross Weight: 117.600 g



**Potency  
Tested**



**Pathogenic  
Passed**



Microbiology Petrifilm  
**Passed**

Product Image

**Potency 10**  
Specimen Weight: 100.880 mg

**Tested**  
SOP13.001 (LCUV)



**Potency Summary**

Analyte	Dilution (1:n)	LOD (%)	LOQ (%)	Result (mg/g)	(%)
CBD	10.000	5.40E-5	0.0015	34.4900	3.4490
CBC	10.000	1.80E-5	0.0015	1.2000	0.1200
CBG	10.000	2.48E-4	0.0015	0.7700	0.0770
CBN	10.000	1.40E-5	0.0015	0.4300	0.0430
CBDA	10.000	1.00E-5	0.0015	<LOQ	<LOQ
CBDV	10.000	6.50E-5	0.0015	<LOQ	<LOQ
CBGA	10.000	8.00E-5	0.0015	<LOQ	<LOQ
Delta-9 THC	10.000	1.30E-5	0.0015	<LOQ	<LOQ
THCA-A	10.000	3.20E-5	0.0015	<LOQ	<LOQ
THCV	10.000	7.00E-6	0.0015	<LOQ	<LOQ
Total Active CBD	10.000			34.490	3.449
Total Active THC	10.000			<LOQ	<LOQ

<b>Total Active THC</b> None Detected	<b>Total Active CBD</b> 3.449%
<b>Total CBG</b> 0.077%	<b>Total CBN</b> 0.043%
<b>Total Cannabinoids</b> 3.689%	

*Aixia Sun*  
Aixia 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 = THC + (THCV \* 0.87) + (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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**900mg Broad Spectrum Tincture- Natural**


Batch ID or Lot Number: <b>240830B</b>	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 1 of 5
Reported: <b>24Jun2024</b>	Started: 21Jun2024	Received: 20Jun2024	


**Residual Solvents -  
Colorado Compliance**

Test ID: T000284664  
Methods: TM04 (GC-MS): Residual

Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	78 - 1566	ND	
Butanes (Isobutane, n-Butane)	159 - 3188	ND	
Methanol	62 - 1234	ND	
Pentane	84 - 1683	ND	
Ethanol	93 - 1870	ND	
Acetone	98 - 1954	ND	
Isopropyl Alcohol	104 - 2082	ND	
Hexane	6 - 120	ND	
Ethyl Acetate	100 - 2008	ND	
Benzene	0.2 - 4.1	ND	
Heptanes	93 - 1863	ND	
Toluene	18 - 364	ND	
Xylenes (m,p,o-Xylenes)	131 - 2618	ND	

**Final Approval**

  
 Karen Winternheimer  
 24Jun2024  
 08:41:00 AM MDT  
 PREPARED BY / DATE

  
 Sam Smith  
 24Jun2024  
 09:00:00 AM MDT  
 APPROVED BY / DATE

**900mg Broad Spectrum Tincture- Natural**

Batch ID or Lot Number: <b>240830B</b>	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 4 of 5
Reported: <b>24Jun2024</b>	Started: 21Jun2024	Received: 20Jun2024	

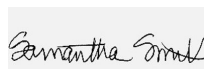
**Pesticides**

Test ID: T000284661

Methods: TM17

(LC-QQ LC MS/MS)	Dynamic Range (ppb)	Result (ppb)	Dynamic Range (ppb)	Result (ppb)	
Abamectin	492 - 2782	ND	Malathion	289 - 2740	ND
Acephate	39 - 2737	ND	Metalaxyl	43 - 2742	ND
Acetamiprid	39 - 2709	ND	Methiocarb	41 - 2732	ND
Azoxystrobin	45 - 2727	ND	Methomyl	42 - 2761	ND
Bifenazate	45 - 2708	ND	MGK 264 1	65 - 1532	ND
Boscalid	39 - 2717	ND	MGK 264 2	97 - 1089	ND
Carbaryl	38 - 2731	ND	Myclobutanil	40 - 2704	ND
Carbofuran	42 - 2702	ND	Naled	43 - 2682	ND
Chlorantraniliprole	38 - 2717	ND	Oxamyl	42 - 2764	ND
Chlorpyrifos	25 - 2744	ND	Paclobutrazol	41 - 2702	ND
Clofentezine	278 - 2710	ND	Permethrin	263 - 2746	ND
Diazinon	278 - 2746	ND	Phosmet	43 - 2608	ND
Dichlorvos	264 - 2725	ND	Prophos	277 - 2740	ND
Dimethoate	41 - 2726	ND	Propoxur	42 - 2701	ND
E-Fenpyroximate	260 - 2843	ND	Pyridaben	265 - 2838	ND
Etofenprox	36 - 2769	ND	Spinosad A	30 - 2070	ND
Etoxazole	254 - 2755	ND	Spinosad D	58 - 687	ND
Fenoxycarb	42 - 2737	ND	Spiromesifen	246 - 2837	ND
Fipronil	37 - 2764	ND	Spirotetramat	294 - 2758	ND
Fonicamid	45 - 2733	ND	Spiroxamine 1	15 - 1020	ND
Fludioxonil	268 - 2689	ND	Spiroxamine 2	24 - 1610	ND
Hexythiazox	34 - 2828	ND	Tebuconazole	303 - 2724	ND
Imazalil	284 - 2776	ND	Thiacloprid	43 - 2760	ND
Imidacloprid	43 - 2744	ND	Thiamethoxam	37 - 2739	ND
Kresoxim-methyl	46 - 2757	ND	Trifloxystrobin	42 - 2725	ND

**Final Approval**

  
 Sam Smith  
 27Jun2024  
 09:09:00 AM MDT  
 PREPARED BY / DATE

  
 Karen Winternheimer  
 27Jun2024  
 09:11:00 AM MDT  
 APPROVED BY / DATE

**900mg Broad Spectrum Tincture- Natural**


Batch ID or Lot Number: <b>240830B</b>	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 5 of 5
Reported: <b>24Jun2024</b>	Started: 21Jun2024	Received: 20Jun2024	

**Mycotoxins - Colorado Compliance**

Test ID: T000284665  
Methods: TM18 (UHPLC-QQQ)

LCMS/MS): Mycotoxins	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	1.09 - 127.38	ND	N/A
Aflatoxin B1	0.99 - 32.66	ND	
Aflatoxin B2	0.99 - 32.66	ND	
Aflatoxin G1	1.05 - 32.28	ND	
Aflatoxin G2	1.09 - 32.63	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	

**Final Approval**

  
Samantha Simola  
28Jun2024  
11:47:00 AM MDT  
PREPARED BY / DATE

  
Karen Winternheimer  
28Jun2024  
11:49:00 AM MDT  
APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/73dfe90d-bdbe-4bcf-abaa-8a65766a6b41>

**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 \*(0.877)) and Total CBD = CBD + (CBDa \*(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 \*(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<sup>2</sup> = 100 CFU, 10<sup>3</sup> = 1,000 CFU, 10<sup>4</sup> = 10,000 CFU, 10<sup>5</sup> = 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 A2LA Cert #: 4329.02 Chemical; 4329.03 Biological. Some tests listed on this COA may not be within our scope of A2LA accreditation. Please visit [A2LA for more details](#).



Cert #4329.02  
73dfe90dbdbe4bcfabaa8a65766a6b41.1

**900mg Broad Spectrum Tincture- Natural**

Batch ID or Lot Number: <b>240830B</b>	Test: <b>Metals</b>	Reported: <b>6/26/24</b>	
Matrix: Concentrate Co	Test ID: T000284663	Started: 6/25/24	USDA License: N/A
Status: Active	Method: TM19 (ICP-MS): Heavy Metals	Received: 06/20/2024 @ 10:04 AM	Sampler ID: N/A

**HEAVY METALS DETERMINATION**

Compound	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.047 - 4.66	ND	
Cadmium	0.046 - 4.56	ND	
Mercury	0.048 - 4.82	ND	
Lead	0.047 - 4.70	ND	


 Karen Winternheimer  
 26-Jun-24  
 1:48 PM

PREPARED BY / DATE


 Sam Smith  
 26-Jun-24  
 2:00 PM

APPROVED BY / DATE

**Definitions**

ND = None Detected (Defined by Dynamic Range of the method)

Testing results are based solely upon the sample submitted to Botanacor Laboratories, LLC, in the condition it was received. Botanacor Laboratories, LLC 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 Botanacor Laboratories, LLC.



Certificate #4329.02



**Certificate of Analysis**  
Compliance Test

Batch # 240830B  
Batch Date: 2024-08-30  
Extracted From: N/A

Test Reg State: Colorado

Production Date: 2024-08-30

Order # PRO240903-010001  
Order Date: 2024-09-03  
Sample # AAFX170

Sampling Date: 2024-09-05  
Lab Batch Date: 2024-09-05  
Completion Date: 2024-09-09

Initial Gross Weight: 235.100 g



**Pathogenic**  
**Passed**



Microbiology Petrifilm  
**Passed**

Product Image

**Pathogenic SE (qPCR) - CO**  
Specimen Weight: 25.050 g

Dilution Factor: 1.000

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

**Passed**  
SOP13.029  
(qPCR)

Result (cfu/g)
<b>Passed</b>



**Microbiology (Petrifilm) - CO**  
Specimen Weight: 1007.000 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)

Aixia Sun Lab Director/Principal Scientist  
D.H.Sc., M.Sc., B.Sc., MT (AAB)



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