

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Organic Full Spectrum CBG + CBD Tincture - Mint
PRODUCT STRENGTH: 450mg CBG + 450mg CBD
TINCTURE BATCH: 240826B
BEST BY DATE: 8/26/26
HEMP EXTRACT LOT: 240802A

Physical Attributes

Test	Method	Specification	Results
Color	Joy Internal	Golden to Amber	PASS
Odor	Joy Internal	Characteristic - Olive and Hemp, Mint	PASS
Appearance	Joy Internal	Golden to Amber oil in brown glass bottle with dropper.	PASS
Primary Package Eval.	Joy Internal	Container clean and free of filth. Container caps tight and shrink bands intact	PASS
Secondary Package Eval.	Joy 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
Potency - Total CBD	HPLC-UV DAD	LOQ*: $\geq$ product strength mg / bottle	492mg	PASS
Potency - D9-THC	HPLC-UV DAD	LOQ: $<0.3\%$ total THC (Full spectrum)	NA	PASS
Expanded Pesticide Panel	HPLC-QQQ	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	Below LOQ	PASS
Microbial Escherichia coli (STEC)	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram**	Absent	PASS
Microbial Salmonella	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	Absent	PASS
Microbial Yeast and Mold	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10^2 CFU/gram	Below LOQ	PASS
Microbial Total Coliforms	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10^2 CFU/gram	Below LOQ	PASS
Microbial Total Aerobic Count	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10^3 CFU/gram	Below LOQ	PASS
Heavy Metals	ICP-MS	Arsenic (As): ≤ 1.5 ppm† Cadmium (Cd): ≤ 0.5 ppm Lead (Pb): ≤ 0.5 ppm Mercury (Hg): ≤ 1.5 ppm	Below LOQ	PASS
Mycotoxins	ICP-MS	Total Aflatoxins <20 ppb†† Aflatoxin B1 <5 ppb Ochratoxin <5 ppb	Below LOQ	PASS
Residual Solvents	GC-HS-MSD	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	Below LOQ	PASS

*Level of Quantification

**Colony Forming Units per Gram

† Parts Per Million †† Part Per Billion

Values expressed in scientific notation.

Examples:

$10^2=100$

$10^3=1,000$

Quality Certified

Name

9/10/24

Date



Certificate of Analysis

Compliance Test

Batch # 240826B
Batch Date: 2024-08-13
Extracted From: N/A

Test Reg State: Colorado

Production Date: 2024-08-13

Order # PRO240813-010001
Order Date: 2024-08-13
Sample # AAFV856

Sampling Date: 2024-08-15
Lab Batch Date: 2024-08-15
Completion Date: 2024-08-20

Initial Gross Weight: 230.300 g



**Potency
Tested**



**Pathogenic
Passed**



Microbiology Petrifilm
Passed

Product Image



Potency 10

Specimen Weight: 505.900 mg

Tested

SOP13.001 (LCUV)

Analyte	Dilution (1:n)	LOD (%)	LOQ (%)	Result (mg/g)	(%)
CBG	50.000	2.48E-4	0.0015	18.5100	1.8510
CBD	50.000	5.40E-5	0.0015	17.8500	1.7850
CBG	50.000	1.80E-5	0.0015	1.5500	0.1550
CBN	50.000	1.40E-5	0.0015	0.2200	0.0220
CBDA	50.000	1.00E-5	0.0015	<LOQ	<LOQ
CBDV	50.000	6.50E-5	0.0015	<LOQ	<LOQ
CBGA	50.000	8.00E-5	0.0015	<LOQ	<LOQ
Delta-9 THC	50.000	1.30E-5	0.0015	<LOQ	<LOQ
THCA-A	50.000	3.20E-5	0.0015	<LOQ	<LOQ
THCV	50.000	7.00E-6	0.0015	<LOQ	<LOQ
Total Active CBD	50.000			17.850	1.785
Total Active THC	50.000			<LOQ	<LOQ



Potency Summary

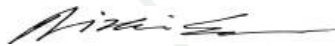
Total Active THC
None Detected

Total Active CBD
1.785%, 492mg

Total CBG
1.851%, 510mg

Total CBN
0.022%

Total Cannabinoids
3.813%, 1052mg



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 THCV = 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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Certificate of Analysis

Compliance Test

Batch # 240826B

Test Reg State: Colorado

Batch Date: 2024-09-05

Extracted From: Hemp

Order # 240905-010001
Order Date: 2024-09-05
Sample # AAFX432

Sampling Date: 2024-09-06
Lab Batch Date: 2024-09-06
Completion Date: 2024-09-09

Initial Gross Weight: 235.800 g

Pesticides - CO

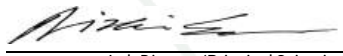
Specimen Weight: 597.300 mg

Passed

SOP14.003 (LCMS/GCMS)

Dilution Factor: 2.510

Analyte	LOD (ppb)	LOQ (ppb)	Action Limit (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Action Limit (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Action Limit (ppb)	Result (ppb)
Abamectin	3.1800E-4	100	100	<LOQ	Dodemorph	6.4700E-12	50	50	<LOQ	Naled	5.8500E-6	100	100	<LOQ
Acephate	3.9632E-2	20	20	<LOQ	Endosulfan sulfate	8.8376E-1	50	50	<LOQ	Novaluron	2.0500E-4	50	50	<LOQ
Acequinocyl	5.7646E-2	30	30	<LOQ	Endosulfan-alpha	1.2220E+1	200	200	<LOQ	Oxamyl	1.6190E-3	3000	3000	<LOQ
Acetamiprid	3.3800E-10	100	100	<LOQ	Endosulfan-beta	2.2760E+1	50	50	<LOQ	Paclobutrazol	6.9300E-8	20	20	<LOQ
Aldicarb	2.2744E-2	1000	1000	<LOQ	Ethoprophos	1.5900E-5	20	20	<LOQ	Pentachloronitrobenzen (Quintozene)	4.3900E+0	20	20	<LOQ
Allethrin	4.7244E-1	200	200	<LOQ	Etofenprox	8.3050E-3	50	50	<LOQ	Permethrin	2.2089E-2	500	500	<LOQ
Atrazine	3.7992E-1	25	25	<LOQ	Etoxazole	8.3558E-1	20	20	<LOQ	Phenothrin	2.1200E-7	50	50	<LOQ
Azadirachtin	3.0710E-3	1000	1000	<LOQ	Etridiazole	4.0200E+0	30	30	<LOQ	Phosmet	9.6150E-3	20	20	<LOQ
Azoxystrobin	1.3247E-2	20	20	<LOQ	Fenhexamid	1.0947E+0	125	125	<LOQ	Piperonylbutoxide	1.3400E-7	200	200	<LOQ
Benzovindiflupyr	1.2567E-2	20	20	<LOQ	Fenoxycarb	3.4507E-1	20	20	<LOQ	Pirimicarb	5.6600E-5	20	20	<LOQ
Bifenazate	2.1700E-8	20	20	<LOQ	Fenpyroximate	4.4800E-7	20	20	<LOQ	Prallethrin	1.6732E-1	50	50	<LOQ
Bifenthrin	8.4200E-4	1000	1000	<LOQ	Fensulfothion	7.9400E-4	20	20	<LOQ	Propiconazole	2.1300E-14	100	100	<LOQ
Boscalid	4.3300E-6	20	20	<LOQ	Fenthion	4.9113E+0	20	20	<LOQ	Propoxur	3.5081E-1	20	20	<LOQ
Buprofezin	1.6600E-9	20	20	<LOQ	Fenvalerate	5.9775E-1	100	100	<LOQ	Pyraclostrobin	5.3100E-7	20	20	<LOQ
Carbaryl	1.3800E-5	50	50	<LOQ	Flipronil	2.8847E-2	60	60	<LOQ	Pyrethrins	6.2350E-3	50	50	<LOQ
Carbofuran	7.7600E-5	20	20	<LOQ	Flonicamid	6.9733E-2	50	50	<LOQ	Pyridaben	8.7500E-15	50	50	<LOQ
Chlorantraniliprole	1.3559E-1	20	20	<LOQ	Fludioxonil	1.3402E-2	20	20	<LOQ	Pyriproxyfen	9.5800E-5	10	10	<LOQ
Chlorfenapyr	1.5370E+1	50	50	<LOQ	Fluopyram	1.1200E-9	20	20	<LOQ	Resmethrin	6.8013E-2	100	100	<LOQ
Chlorpyrifos	9.0900E-5	40	40	<LOQ	Hexythiazox	6.1900E-5	10	10	<LOQ	Spinetoram	2.3645E-2	20	20	<LOQ
Clofentezine	3.7100E-7	20	20	<LOQ	Imazalil	2.9500E-4	50	50	<LOQ	Spinosad	5.9903E-1	100	100	<LOQ
Clothianidin	3.9900E-4	50	50	<LOQ	Imidacloprid	1.5300E-4	20	20	<LOQ	Spirodiclofen	3.7377E-1	250	250	<LOQ
Coumaphos	9.8600E-5	20	20	<LOQ	Iprodione	1.0554E-1	1000	1000	<LOQ	Spiromesifen	3.2183E-1	3000	3000	<LOQ
Cyantraniliprole	6.0040E-3	20	20	<LOQ	Kinoprene	3.4000E+0	500	500	<LOQ	Spirotetramat	4.2760E-2	20	20	<LOQ
Cyfluthrin	2.8130E+1	200	200	<LOQ	Kresoxim Methyl	1.4500E-4	20	20	<LOQ	Spiroxamine	1.2172E+0	100	100	<LOQ
Cypermethrin	1.1900E-6	300	300	<LOQ	Lambda Cyhalothrin	1.1686E-1	250	250	<LOQ	Tebuconazole	1.4800E-14	50	50	<LOQ
Cyprodinil	1.1410E-3	250	250	<LOQ	Malathion	1.3300E-4	20	20	<LOQ	Tebufenozide	1.8121E-2	20	20	<LOQ
Daminozide	3.0408E-1	100	100	<LOQ	Metalaxyl	4.8600E-5	20	20	<LOQ	Teflubenzuron	1.6620E-2	50	50	<LOQ
Deltamethrin	4.9284E-1	500	500	<LOQ	Methiocarb	2.2810E-3	20	20	<LOQ	Tetrachlorvinphos	8.3913E-1	20	20	<LOQ
Diazinon	3.9100E-10	20	20	<LOQ	Methomyl	1.1500E-6	50	50	<LOQ	Tetramethrin	9.9200E-5	100	100	<LOQ
Dichlorvos	1.1406E+0	100	100	<LOQ	Methoprene	1.1485E+0	2000	2000	<LOQ	Thiabendazole	1.2510E-3	20	20	<LOQ
Dimethoate	2.8400E-6	20	20	<LOQ	methyl-Parathion	4.2400E+0	50	50	<LOQ	Thiacloprid	1.1200E-5	20	20	<LOQ
Dimethomorph	1.5700E-4	50	50	<LOQ	Mevinphos	4.4200E-5	50	50	<LOQ	Thiamethoxam	2.2500E-6	20	20	<LOQ
Dinotefuran	2.3697E-1	100	100	<LOQ	MGK-264	2.5880E-3	50	50	<LOQ	Thiophanate-methyl	2.2300E-4	50	50	<LOQ
Diuron	6.8620E-3	125	125	<LOQ	Myclobutanil	7.0006E-1	20	20	<LOQ	Trifloxystrobin	2.1700E-13	20	20	<LOQ


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

Definitions are found on page 1

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Certificate of Analysis
Compliance Test

Batch # 240826B
Batch Date: 2024-09-05
Extracted From: Hemp

Test Reg State: Colorado

Order # 240905-010001
Order Date: 2024-09-05
Sample # AAFX432

Sampling Date: 2024-09-06
Lab Batch Date: 2024-09-06
Completion Date: 2024-09-09

Initial Gross Weight: 235.800 g



Product Image



Heavy Metals
Passed



Mycotoxins
Passed



Pesticides
Passed



Residual Solvents
Passed



Mycotoxins - CO

Specimen Weight: 597.300 mg

Passed
SOP14.003 (LCMS)

Dilution Factor: 2.510

Analyte	LOD (ppb)	LOQ (ppb)	Action Limit (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Action Limit (ppb)	Result (ppb)
Aflatoxin B1	3.7250E-1	2.5	5	<LOQ	Ochratoxin A	1.8997E-1	3.5	5	<LOQ
Aflatoxin Total		2.5	20	<LOQ					



Heavy Metals - CO

Specimen Weight: 248.000 mg

Passed
SOP13.048 (ICP-MS)

Dilution Factor: 201.613

Analyte	LOD (ppb)	LOQ (ppb)	Action Limit (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Action Limit (ppb)	Result (ppb)
Arsenic (As)	4.83	100	1500	<LOQ	Lead (Pb)	0.58	100	500	<LOQ
Cadmium (Cd)	0.64	100	500	<LOQ	Mercury (Hg)	11.76	100	1500	<LOQ



Residual Solvents - FL (CBD)

Specimen Weight: 307.300 mg

Passed
SOP13.039 (GCMS)

Dilution Factor: 841.400

Analyte	LOD (ppm)	LOQ (ppm)	Action Limit (ppm)	Result (ppm)	Analyte	LOD (ppm)	LOQ (ppm)	Action Limit (ppm)	Result (ppm)
1,1-Dichloroethene	0.0094	0.16	8	<LOQ	Heptane	0.0013	1.39	5000	<LOQ
1,2-Dichloroethane	0.0003	0.04	5	<LOQ	Hexane	0.068	1.17	290	<LOQ
Acetone	0.015	2.08	5000	<LOQ	Isopropyl alcohol	0.0048	1.39	500	<LOQ
Acetonitrile	0.06	1.17	410	<LOQ	Methanol	0.0005	0.69	3000	<LOQ
Benzene	0.0002	0.02	2	<LOQ	Methylene chloride	0.0029	2.43	600	<LOQ
Butanes	0.4167	2.5	2000	<LOQ	Pentane	0.037	2.08	5000	<LOQ
Chloroform	0.0001	0.04	60	<LOQ	Propane	0.031	5.83	2100	<LOQ
Ethanol	0.0021	2.78	NA	<LOQ	Toluene	0.0009	2.92	890	<LOQ
Ethyl Acetate	0.0012	1.11	5000	<LOQ	Total Xylenes	0.0001	2.92	2170	<LOQ
Ethyl Ether	0.0049	1.39	5000	<LOQ	Trichloroethylene	0.0014	0.49	80	<LOQ
Ethylene Oxide	0.0038	0.1	5	<LOQ					

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 = 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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Certificate of Analysis

Compliance Test

Batch # 240804@
Batch Date: 2024-08-13
Extracted From: N/A

Test Reg State: Colorado

Production Facility: Proper Rhino Packaging
Production Date: 2024-08-13

Order # PRO240813-010001
Order Date: 2024-08-13
Sample # AAFV856

Sampling Date: 2024-08-15
Lab Batch Date: 2024-08-15
Completion Date: 2024-08-20

Initial Gross Weight: 230.300 g

Pathogenic SE (qPCR) - CO
Specimen Weight: 25.000 g

Passed
SOP13.029
(qPCR)

Dilution Factor: 1.000

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

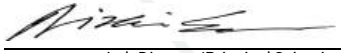


Microbiology (Petrifilm) - CO
Specimen Weight: 992.000 mg

Passed
SOP13.003
(Petrifilm)

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				


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

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