CERTIFICATE OF ANALYSIS

PRODUCT NAME:	CBD Softgels with Curcumin
PRODUCT STRENGTH:	25 mg CBD / 10 mg Curcumin
FILL LOT NUMBER:	**21143**
SOFTGEL LOT NUMBER:	21096A
BEST BY DATE:	09/03/2022

Click on the links to view third-party reports

Physical Atttributes

Test	Method	Specification	Results
Color	SOP-100	Bright Red to Pink	PASS
Odor	SOP-100	N/A	PASS
Appearance	SOP-100	Dry, ovoid softgel capsules in container with lid and shrinkband	PASS
Primary Package Eval.	SOP-132	Container clean and free of filth. Container caps tight and shrink bands intact	PASS
Secondary Package Eval.	SOP-132	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	SOP-111	25-31.25 mg CBD LOQ**: 10 PPM† (0.001%)	**28 mg**	PASS
Potency - D9-THC	SOP-111	None Detected LOQ: 10 PPM (0.001%)	**ND**	PASS
Compliant Pesticide Panel	SOP-111	WIP-100008 : Product specification for Tinctures, Oregon Action limits apply	**ND**	PASS
Microbial - Stec E.Coli	SOP-111	Complies with USP 61/62	**Below LOQ**	PASS
Microbial - Salmonella	SOP-111	Complies with USP 61/62	**Below LOQ**	PASS
Microbial - Yeast and Mold	SOP-111	Complies with USP 61/62	**Below LOQ**	PASS
CA Compliant Heavy Metal Panel	SOP-111	Arsenic (As): ≤1.5 PPM Cadmium (Cd): ≤0.5 PPM Mercury (Hg): ≤1.0 PPM Lead (Pb): ≤0.5 PPM	**ND**	PASS

* *Level of Quantitation, † Parts Per Million

Quality Certified — Kei Horikawa — 04/13/2021

Kei Horikawa
Quality Control Manager

Date

certificate ID
1CD57

Nano BS Curcumin 25mg

7USC1639 Certificate of Analysis

Lot# 21143

rec'd 3/5/2021 11:34:16 AM

order 10005

total cannabinoids
29.2mg per pill

THC tot ND

CBD tot 28.0mg

This Product Has Been Tested and Complies with 7USC1639o(1)

Stillwater Laboratories

Potency per pill

MSP-7.5.1.4

		LOD | LOQ | error (95%CI k=2)
total cannabinoids	**29.2mg**	**0.15 | 0.46 | ±0.69mg**
total THC‡	**ND**	**0.15 | 0.46 | ±0.46mg**
total THC (THC+THCa)	**ND**	**0.15 | 0.46 | ±0.46mg**
total CBD‡	**28.0mg**	**0.15 | 0.46 | ±0.68mg**
total CBD (CBD+CBDa)	**28.0mg**	**0.15 | 0.46 | ±0.68mg**
tetrahydrocannabolic acid (THCa)	ND	0.15 | 0.46 | ±0.46mg
Δ9-tetrahydrocannabinol (Δ9 THC)	ND	0.14 | 0.43 | ±0.43mg
Δ8-tetrahydrocannabinol (Δ8 THC)	ND	0.19 | 0.58 | ±0.58mg
tetrahydrocannabivarin (THCv)	ND	0.16 | 0.48 | ±0.48mg
cannabidiolic acid (CBDa)	<LOQ	0.13 | 0.40 | ±0.40mg
cannabidiol (CBD)	27.8mg	0.15 | 0.46 | ±0.68mg
cannabidivarin (CBDv)	ND	0.15 | 0.46 | ±0.46mg
cannabigerolic acid (CBGa)	ND	0.14 | 0.41 | ±0.41mg
cannabigerol (CBG)	0.7mg	0.04 | 0.13 | ±0.14mg
cannabinol (CBN)	ND	0.08 | 0.25 | ±0.25mg
cannabichromene (CBC)	<LOQ	0.15 | 0.46 | ±0.46mg

Terpenes

MSP-7.5.1.6

caryophyllene
humulene
terpinolene
ocimene
beta pinene
alpha pinene
limonene
myrcene
linalool

total terpenes	**ND**
linalool	ND
β-myrcene	ND
D-limonene	ND
α-pinene	ND
β-pinene	ND
ocimene	ND
terpinolene	ND
α-humulene	ND
β-caryophyllene	ND
α-bisabolol	ND
camphene	ND
Δ3-carene	ND
caryophyllene oxide	ND
para-cymene	ND
eucalyptol	ND
geraniol	ND
guaiol	ND

Microbial

MSP-7.5.1.10

		limit	LOD | LOQ | error	result
E.coli	ND	0CFU	0.0 | 0.1 | ±0.1CFU	PASS
Salmonella sp.	ND	0CFU	0.0 | 0.1 | ±0.1CFU	PASS
molds	ND	10000CFU	1.7 | 5.0 | ±5.0CFU	PASS
Ochratoxin A	ND	20 ppb	0.4 | 1.3 | ±1.3 ppb	PASS
Aflatoxin B1B2G1G2	ND	20 ppb	0.4 | 1.3 | ±1.3 ppb	PASS

Solvents

MSP-7.5.1.7

		limit	LOD | LOQ | error	result
Acetone	ND	5000 ppm	0.6 | 1.8 | ±1.8 ppm	PASS
Acetonitrile	ND	410 ppm	0.5 | 1.6 | ±1.6 ppm	PASS
Benzene	ND	0 ppm	0.0 | 0.1 | ±0.1 ppm	PASS
Butane	ND	5000 ppm	1.3 | 3.8 | ±3.8 ppm	PASS
Chloroform	ND	0 ppm	0.1 | 0.2 | ±0.2 ppm	PASS
Cyclohexane	ND	0 ppm	0.5 | 1.4 | ±1.4 ppm	PASS
Ethanol	8 ppm	10000 ppm	0.6 | 1.9 | ±2.1 ppm	PASS
Heptane	ND	5000 ppm	0.4 | 1.1 | ±1.1 ppm	PASS
Hexane	ND	290 ppm	0.5 | 1.4 | ±1.4 ppm	PASS
Isopropyl alcohol	ND	5000 ppm	0.6 | 1.7 | ±1.7 ppm	PASS
Methanol	ND	3000 ppm	0.5 | 1.4 | ±1.4 ppm	PASS
Pentane	ND	5000 ppm	0.2 | 0.5 | ±0.5 ppm	PASS
Propane	ND	5000 ppm	0.5 | 1.4 | ±1.4 ppm	PASS
Toluene	ND	890 ppm	0.3 | 0.8 | ±0.8 ppm	PASS
Xylenes	ND	2170 ppm	0.3 | 0.9 | ±0.9 ppm	PASS

Metals

MSP-7.5.1.11

		limit	LOD | LOQ | error	result
Arsenic	ND	1500 ppb	2.5 | 7.5 | ±7.5 ppb	PASS
Cadmium	ND	500 ppb	2.7 | 8.0 | ±8.0 ppb	PASS
Lead	ND	500 ppb	4.2 | 12.5 | ±12.5 ppb	PASS
Mercury	ND	300 ppb	2.1 | 6.3 | ±6.3 ppb	PASS

Pesticides

MSP-7.5.1.8

		limit	LOD | LOQ | error	result
Pyrethrin	ND	1.00 ppm	0.003 | 0.008 | ±0.008 ppm	PASS
Pyridaben	ND	3.00 ppm	0.001 | 0.003 | ±0.003 ppm	PASS
Spinetoram	ND	3.00 ppm	0.004 | 0.011 | ±0.011 ppm	PASS
Spinosad	ND	3.00 ppm	0.007 | 0.020 | ±0.020 ppm	PASS
Spiromesifen	ND	12.00 ppm	0.003 | 0.009 | ±0.009 ppm	PASS
Spirotetramat	ND	13.00 ppm	0.002 | 0.007 | ±0.007 ppm	PASS
Spiroxamine	ND	0.00 ppm	0.001 | 0.003 | ±0.003 ppm	PASS
Tebuconazole	ND	2.00 ppm	0.005 | 0.016 | ±0.016 ppm	PASS
Thiacloprid	ND	0.10 ppm	0.001 | 0.003 | ±0.003 ppm	PASS
Thiamethoxam	ND	4.50 ppm	0.003 | 0.009 | ±0.009 ppm	PASS
Trifloxystrobin	ND	30.00 ppm	0.002 | 0.007 | ±0.007 ppm	PASS

Pesticides

MSP-7.5.1.8

		limit	LOD | LOQ | error	result
Abamectin	ND	0.30 ppm	0.007 | 0.022 | ±0.022 ppm	PASS
Acephate	ND	5.00 ppm	0.008 | 0.023 | ±0.023 ppm	PASS
Acequinocyl	ND	4.00 ppm	0.007 | 0.020 | ±0.020 ppm	PASS
Acetamiprid	ND	5.00 ppm	0.005 | 0.016 | ±0.016 ppm	PASS
Aldicarb	ND	0.00 ppm	0.002 | 0.006 | ±0.006 ppm	PASS
Azoxystrobin	ND	40.00 ppm	0.002 | 0.006 | ±0.006 ppm	PASS
Bifenazate	ND	5.00 ppm	0.002 | 0.005 | ±0.005 ppm	PASS
Bifenthrin	ND	0.50 ppm	0.001 | 0.003 | ±0.003 ppm	PASS
Boscalid	ND	10.00 ppm	0.021 | 0.064 | ±0.064 ppm	PASS
Carbaryl	ND	0.50 ppm	0.008 | 0.025 | ±0.025 ppm	PASS
Carbofuran	ND	0.00 ppm	0.002 | 0.005 | ±0.005 ppm	PASS
Chloantraniliprole	ND	40.00 ppm	0.020 | 0.061 | ±0.061 ppm	PASS
Chlorfenapyr	ND	0.00 ppm	0.005 | 0.016 | ±0.016 ppm	PASS
Chlorpyrifos	ND	0.00 ppm	0.042 | 0.127 | ±0.127 ppm	PASS
Clofentezine	ND	0.50 ppm	0.008 | 0.023 | ±0.023 ppm	PASS
Coumaphos	ND	0.00 ppm	0.005 | 0.016 | ±0.016 ppm	PASS
Cyfluthrin	ND	1.00 ppm	0.008 | 0.023 | ±0.023 ppm	PASS
Cypermethrin	ND	1.00 ppm	0.005 | 0.016 | ±0.016 ppm	PASS
Daminozide	ND	0.00 ppm	0.029 | 0.086 | ±0.086 ppm	PASS
Dichlorvos	ND	0.00 ppm	0.015 | 0.044 | ±0.044 ppm	PASS
Diazinon	ND	0.20 ppm	0.001 | 0.004 | ±0.004 ppm	PASS
Dimethoate	ND	0.00 ppm	0.002 | 0.006 | ±0.006 ppm	PASS
Etoxazole	ND	1.50 ppm	0.004 | 0.012 | ±0.012 ppm	PASS
Fenoxycarb	ND	0.00 ppm	0.004 | 0.011 | ±0.011 ppm	PASS
Fenpyroximate	ND	2.00 ppm	0.001 | 0.004 | ±0.004 ppm	PASS
Fipronil	ND	0.00 ppm	0.008 | 0.023 | ±0.023 ppm	PASS
Flonicamid	ND	2.00 ppm	0.102 | 0.307 | ±0.307 ppm	PASS
Fludioxonil	ND	30.00 ppm	0.007 | 0.020 | ±0.020 ppm	PASS
Hexythiazox	ND	2.00 ppm	0.001 | 0.003 | ±0.003 ppm	PASS
Imazalil	ND	0.00 ppm	0.007 | 0.020 | ±0.020 ppm	PASS
Imidacloprid	ND	3.00 ppm	0.001 | 0.004 | ±0.004 ppm	PASS
Malathion	ND	5.00 ppm	0.005 | 0.016 | ±0.016 ppm	PASS
Metalaxyl	ND	15.00 ppm	0.008 | 0.024 | ±0.024 ppm	PASS
Methiocarb	ND	0.00 ppm	0.004 | 0.011 | ±0.011 ppm	PASS
Methomyl	ND	0.10 ppm	0.001 | 0.002 | ±0.002 ppm	PASS
Methyl parathion	ND	0.00 ppm	0.001 | 0.003 | ±0.003 ppm	PASS
Mevinphos	ND	0.00 ppm	0.005 | 0.016 | ±0.016 ppm	PASS
Myclobutanil	ND	9.00 ppm	0.001 | 0.003 | ±0.003 ppm	PASS
Naled	ND	0.50 ppm	0.005 | 0.016 | ±0.016 ppm	PASS
Oxamyl	ND	0.20 ppm	0.002 | 0.007 | ±0.007 ppm	PASS
Paclobutrazol	ND	0.00 ppm	0.003 | 0.009 | ±0.009 ppm	PASS
Permethrin	ND	20.00 ppm	0.010 | 0.031 | ±0.031 ppm	PASS
Phosmet	ND	0.20 ppm	0.003 | 0.009 | ±0.009 ppm	PASS
Piperonylbutoxide	ND	8.00 ppm	0.011 | 0.032 | ±0.032 ppm	PASS
Prallethrin	ND	0.40 ppm	0.004 | 0.012 | ±0.012 ppm	PASS
Propiconazole	ND	20.00 ppm	0.004 | 0.012 | ±0.012 ppm	PASS
Propoxur	ND	0.00 ppm	0.006 | 0.018 | ±0.018 ppm	PASS

SECURITY FEATURE: WATERMARK MUST MATCH CERTIFICATE ID AND ISSUE DATE

Certified by:

Kyle Larson, MSc
Deputy Director

QA Manager

Jacob Harris

ISO/IEC 17025:2017

ACCREDITED

Certificate #4961.01

https://portal.a2la.org/scopepdf/4961-01.pdf

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Stillwater Laboratories Inc.
MT License L0001, L00007
6073 US93N Suite 5, Olney MT 59927
406-881-2019

INSTRUMENTS: Potency by HPLC (LC2030C-UV), solvents and terpenes by GCMS (QP2020/HS20), pesticides and mycotoxins by LCMSMS (LC8060), microbial by qPCR (AriaMx) and plating (Hardy Diagnostics), metals by ICPMS (ICPMS-2030)

• All testing was completed onsite at 6073 US93N, Olney MT •• Potency (cannabinoid concentration) is calcuated as: [cannabioid] = $[\text{cannabinoid}]_{HPLC} \times \text{volume}_{dilution}/m_{dry}$. ••• Decarboxyted cannabinoid concentration is calculated $XXX_{total} = 0.877 \times XXXa + XXX$ •••• Standards are used to calibrate the resulting data and estimate error using a standard estimate of error method; LOD is the limit of detection ($3.3s_i$), LOQ is the limit of quantification (3xLOD), and experimental error is calculated from weighing, dilution, and interpolation error using the formula $s_g^2 = \sum(\partial f/\partial i)^2 s_i^2$ where i is the contributor to error. The 95% confidence range is calculated from: (concentration) ± $t_{CL90} \times s_g$. Sampling error is not considered in error calculations. ND = not detected (< LOD), NT = not tested, NL = no limit, NA = not applicable. ‡ = decarbed

BioChroma Analytical Labs, LLC
1309 Record Crossing Rd
Dallas, TX 75235

Analytical Report

Report Date: 03/10/2021

Work Order: CHSG210304-032
Received Date: 03/04/2021
P.O. #:

Comments:

Sample Num: 21CH02105 **Lot Number:** 21143
Client Sample Num: BS 25mg Curcumin
Comments:

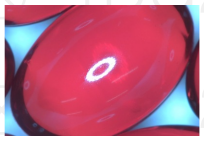
Analysis	Method Reference	Result	Unit	Analysis Date	Approval Date
Curcuminoid- Bis-demethoxycurcumin	AOAC 2016.16	0.127	mg/svg	03/10/2021	03/10/2021
Curcuminoid- Curcumin	AOAC 2016.16	10.08	mg/svg	03/10/2021	03/10/2021
Curcuminoid- Demethoxycurcumin	AOAC 2016.16	1.15	mg/svg	03/10/2021	03/10/2021
Curcuminoid- Total Curcuminoids	AOAC 2016.16	11.36	mg/svg	03/10/2021	03/10/2021

Reviewed by:
Cheri Turman, PhD., Vice President

certificate ID
1DG23

SG25C

Lot# 21096A



rec'd 4/8/2021 12:51:59 PM order 10374

R Certificate of Analysis

Stillwater Laboratories

Microbial

MSP-7.5.1.10	limit	LOD	LOQ	error	result
E.coli	ND	NL	0.1 I 0.2 I	±0.2CFU	NA
Salmonella sp.	ND	NL	0.1 I 0.2 I	±0.2CFU	NA
molds	ND	NL	2.9 I 8.8 I	±8.8CFU	NA

Metals

MSP-7.5.1.11	limit	LOD	LOQ	error	result

SECURITY FEATURE: WATERMARK MUST MATCH CERTIFICATE ID AND ISSUE DATE

Certified by:

Kyle Larson, MSc
Deputy Director

Jacob Harris
QA Manager

ISO/IEC 17025:2017
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6073 US93N Suite 5, Olney MT 59927
406-881-2019

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INSTRUMENTS: Potency by HPLC (LC2030C-UV), solvents and terpenes by GCMS (QP2020/HS20), pesticides and mycotoxins by LCMSMS (LC8060), microbial by qPCR (AriaMx) and plating (Hardy Diagnostics), metals by ICPMS (ICPMS-2030)

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