

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Certified Organic CBD Tincture - Natural
PRODUCT STRENGTH: 450 mg
FILL LOT NUMBER: B1014-001
TINCTURE BATCH: 20358A
BEST BY DATE: 06/23/2022
HEMP EXTRACT LOT NA

Click on the links to view third-party reports

Physical Attributes

Test	Method	Specification	Results
Color	SOP-100	Golden to Amber	PASS
Odor	SOP-100	Characteristic - Olive and hemp	PASS
Appearance	SOP-100	Golden to Amber oil in brown glass bottle with dropper	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	450-562.5 mg CBD LOQ**: 10 PPM† (0.001%)	459.1 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

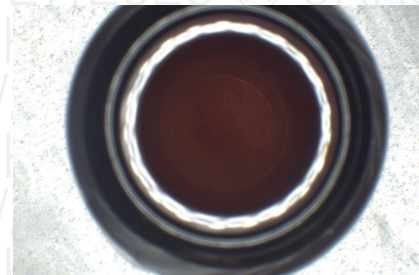
Kei Horikawa
Quality Control Manager

12/30/2020

Date

**B1014-001****7USC1639 Certificate of Analysis**sample ID 24963
retention ID 24963

analysis : 10/22/2020 12:01:11 PM

**This Product
Has Been
Tested and
Complies with
7USC1639o(1)****Stillwater
Laboratories**certificate ID
0KR38total
cannabinoids **467.9mg** per 30 mL
THC‡ ND CBD‡ 459.1mgorder 8689
received 10/22/2020 12:01:11 PM
test tag
sample wgt 15.0 g**7USC1639 Infused****Inspection** MSP-7.5.1.2

DESCRIPTION: Oil sample (15.00g) received in a client-labeled bottle, by commercial courier. Labeled 24963.

Potency per 30 mL

MSP-7.5.1.4 LOD LOQ error (95%CI k=2)

tetrahydrocannabinolic acid (THCa)	ND	0.17	0.51	±0.51mg
Δ9-tetrahydrocannabinol (Δ9 THC)	ND	0.16	0.48	±0.48mg
Δ8-tetrahydrocannabinol (Δ8 THC)	ND	0.22	0.65	±0.65mg
tetrahydrocannabivarin (THCv)	ND	0.18	0.54	±0.54mg
cannabidiolic acid (CBDA)	ND	0.15	0.44	±0.44mg
cannabidiol (CBD)	459.1mg	0.17	0.51	±8.23mg
cannabidivarin (CBDv)	1.9mg	0.17	0.51	±0.54mg
cannabigerolic acid (CBGa)	ND	0.15	0.45	±0.45mg
cannabigerol (CBG)	6.9mg	0.18	0.55	±0.67mg
cannabinol (CBN)	ND	0.09	0.28	±0.28mg
cannabichromene (CBC)	ND	0.17	0.51	±0.51mg

‡ = decarbed NT = not tested NL = no limit, ND = not detected, LOD = detection limit, LOQ = quantitation limit

Microbial	MSP-7.5.1.10	limit	Metals	MSP-7.5.1.11	limit	Pesticides	MSP-7.5.1.8	limit	Pesticides	MSP-7.5.1.8	limit
			Arsenic	PASS	1500 ppb	Daminozide	PASS	0.0 ppm	Piperonylbutoxide	PASS	8.0 ppm
			Cadmium	PASS	500 ppb	Dichlorvos	PASS	0.0 ppm	Prallethrin	PASS	0.4 ppm
			Lead	PASS	500 ppb	Diazinon	PASS	0.2 ppm	Propiconazole	PASS	20.0 ppm
Ochratoxin A	PASS	20 ppb	Mercury	PASS	300 ppb	Dimethoate	PASS	0.0 ppm	Propoxur	PASS	0.0 ppm
Aflatoxin	PASS	20 ppb				Etozazole	PASS	1.5 ppm	Pyrethrin	PASS	1.0 ppm
Solvents	MSP-7.5.1.7	limit	Pesticides	MSP-7.5.1.8	limit	Fenoxycarb	PASS	0.0 ppm	Pyridaben	PASS	3.0 ppm
Acetone	PASS	5000 ppm	Abamectin	PASS	0.3 ppm	Fenpyroximate	PASS	2.0 ppm	Spinetoram	PASS	3.0 ppm
Acetonitrile	PASS	410 ppm	Acephate	PASS	5.0 ppm	Fipronil	PASS	0.0 ppm	Spinosad	PASS	3.0 ppm
Benzene	PASS	0 ppm	Acequinocyl	PASS	4.0 ppm	Flonicamid	PASS	2.0 ppm	Spiromesifen	PASS	12.0 ppm
Butane	PASS	5000 ppm	Acetamiprid	PASS	5.0 ppm	Fludioxonil	PASS	30.0 ppm	Spirotetramat	PASS	13.0 ppm
Chloroform	PASS	0 ppm	Aldicarb	PASS	0.0 ppm	Hexythiazox	PASS	2.0 ppm	Spiroxamine	PASS	0.0 ppm
Cyclohexane	PASS	0 ppm	Azoxystrobin	PASS	40.0 ppm	Imazalil	PASS	0.0 ppm	Tebuconazole	PASS	2.0 ppm
Ethanol	PASS	10000 ppm	Bifenazate	PASS	5.0 ppm	Imidacloprid	PASS	3.0 ppm	Thiacloprid	PASS	0.1 ppm
Heptane	PASS	5000 ppm	Bifenthrin	PASS	0.5 ppm	Malathion	PASS	5.0 ppm	Thiamethoxam	PASS	4.5 ppm
Hexane	PASS	290 ppm	Boscalid	PASS	10.0 ppm	Metalaxyl	PASS	15.0 ppm	Trifloxystrobin	PASS	30.0 ppm
Isopropyl alcohol	PASS	5000 ppm	Carbaryl	PASS	0.5 ppm	Methiocarb	PASS	0.0 ppm			
Methanol	PASS	3000 ppm	Carbofuran	PASS	0.0 ppm	Methomyl	PASS	0.1 ppm			
Pentane	PASS	5000 ppm	Chlorantraniliprole	PASS	40.0 ppm	Methyl parathion	PASS	0.0 ppm			
Propane	PASS	5000 ppm	Chlorfenapyr	PASS	0.0 ppm	Mevinphos	PASS	0.0 ppm			
Toluene	PASS	890 ppm	Chlorpyrifos	PASS	0.0 ppm	Myclobutanil	PASS	9.0 ppm			
Xylenes	PASS	2170 ppm	Clofentezine	PASS	0.5 ppm	Naled	PASS	0.5 ppm			
			Coumaphos	PASS	0.0 ppm	Oxamyl	PASS	0.2 ppm			
			Cyfluthrin	PASS	1.0 ppm	Paclobutrazol	PASS	0.0 ppm			
			Cypermethrin	PASS	1.0 ppm	Permethrin	PASS	20.0 ppm			
						Phosmet	PASS	0.2 ppm			

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

SECURITY FEATURE: WATERMARK MUST MATCH CERTIFICATE ID AND ISSUE DATE

Certified by:

Justin M Johnston
Deputy Director

Stillwater Laboratories Inc.
 MT License L00001, 7, 8
 6073 US93N Suite 5
 Olney MT 59927
 406-881-2019

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ISO/IEC 17025:2017



Certificate #4961-01

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



Lot# 20358A

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



ISO/IEC 17025:2017
ACCREDITED
Certificate #4961.01

Stillwater
Laboratories

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

Sample Handling

test ID	sample wt
type tincture	order 9322
lab ID 0MW21	sample date 12/28/2020
unit	unit weight

Methods

	method	equipment
weights	MSP-7.3.1.3	AUX120.1
potency	MSP-7.5.1.5	LC-2030
terpenes	MSP-7.5.1.7	QP2020/HS20
pesticides	MSP-7.5.1.8	LC-8060
mycotoxins	MSP-7.5.1.8	LC-8060
microbial	MSP-7.5.1.1	AriaMx/Hardy
solvents	MSP-7.5.1.6	QP2020/HS20
metals	MSP-7.5.1.1	ICPMS2030

tincture



Potency	per	estimated error	Terpenes	%	estimated error	%	estimated error	%	estimated error
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not tested

terpenes
not tested / not required

Solvents	MT limit	0MW21	LOQ	Pesticides (MT)	MT limit	0MW21	LOQ	Pesticides (other)	0MW21	LOQ
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pesticides
not tested / not required

not tested /
not required

Toxic Metals	MT limit	0MW21	LOQ
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metals
not tested / not required

Microbial	MT limit	0MW21	LOQ
E. coli	10 CFU	0 CFU	<10 CFU/g
Salmonella sp.	10 CFU	0 CFU	<10 CFU/g
molds	10000 CFU	0 CFU	<10k CFU/g

Comments

Certified by:

Kyle Larson, MSc (Biology)
Deputy Director
6073 US93N, Olney MT 59927
406-881-2019 rdb@stlslabs.com

• All testing was completed onsite at 6073 US93N, Olney MT • Potency (cannabinoid concentration) is calculated from the equation: [cannabinoid] = [cannabinoid]_{HPLC} x volume_{dilution}/m_{dry}. Terpene concentration is calculated from the equation: [terpene] = (terpene mass)_{GCMS} / m_{dry}. •• Decarboxyted cannabinoid concentration is calculated from the equation XXX_{total} = 0.877 x XXX_a + XXX ••• Standards are used to calibrate the resulting data and estimate error using a standard estimate of error method; this is combined with error from weighing and dilution using the propagation of error formula s_g² = Σ(∂f/∂i)²s_i² where i is the contributor to error. The 95% confidence range is calculated from the equation: (concentration) ± t_{CL90} x s_g. Sampling error is not