

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Certified Organic CBD FS Tincture - Key Lime
PRODUCT STRENGTH: 450 mg
FILL LOT NUMBER: 200916A
TINCTURE BATCH: 200921A
BEST BY DATE: 03/28/2022
HEMP EXTRACT LOT [B0630-001](#)

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%)	488.1 mg	PASS
Potency - D9-THC	SOP-111	None Detected LOQ: 10 PPM (0.001%)	.06%	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

10/20/2020

Kei Horikawa
Manager of Quality Assurance

Date



total cannabinoids	Δ^9 -THC	THCa	total THC
18 mg	0.53 mg	0.00 mg	0.53 mg
per mL	CBD	CBDa	total CBD
	16.19 mg	0.09 mg	16.27 mg

Lot# 200916A

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



Stillwater
Laboratories

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

Sample Handling

test ID	sample wt
type	order
lab ID	sample date
unit	unit weight
tincture	8410
0JQ22	9/21/2020
mL	0.9 g

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 RTPCR
solvents	MSP-7.5.1.6	QP2020/HS20
metals	MSP-7.5.1.1	ICPMS2030

tincture



Potency	per	mL	estimated error	Terpenes	%	estimated error	%	estimated error	%	estimated error
tetrahydrocannabinolic acid (THCa)	0%	0.00 mg	± 0.02 mg	terpenes not tested / not required						
Δ^9 -tetrahydrocannabinol (Δ^9 THC)	.06%	0.53 mg	± 0.02 mg							
Δ^8 -tetrahydrocannabinol (Δ^8 THC)	0%	0.00 mg	± 0.02 mg							
tetrahydrocannabivarin (THCv)	0%	0.00 mg	± 0.02 mg							
cannabidiolic acid (CBDa)	.01%	0.09 mg	± 0.02 mg							
cannabidiol (CBD)	1.72%	16.19 mg	± 0.03 mg							
cannabidivarin (CBDv)	.01%	0.08 mg	± 0.02 mg							
cannabigerolic acid (CBGa)	0%	0.00 mg	± 0.02 mg							
cannabigerol (CBG)	.05%	0.44 mg	± 0.02 mg							
cannabinol (CBN)	.02%	0.21 mg	± 0.02 mg							
cannabichromene (CBC)	.06%	0.60 mg	± 0.02 mg							

Solvents	MT limit	0JQ22	LOQ	Pesticides (MT)	MT limit	0JQ22	LOQ	Pesticides (other)	0JQ22	LOQ
				pesticides not tested / not required				not tested / not required		

Toxic Metals	MT limit	0JQ22	LOQ
metals not tested / not required			

Microbial	MT limit	0JQ22	LOQ
microbial not tested			

Comments

Density = 0.94063g/mL

Certified by:

Kyle Larson, MSc (Biology)
Deputy Director
6073 US93N, Olney MT 59927
406-881-2019 rdb@stwlabs.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)² s_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

FullSpectrum Extract

Certificate of Analysis



total cannabinoids	Δ^9 -THC	THCa	total THC
3018 mg	75.4 mg	0.0 mg	75.4 mg
per	CBD	CBDa	total CBD
30mL	2762.0 mg	0.0 mg	2762.0 mg

Lot# B0630-001.200727E-OFS

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

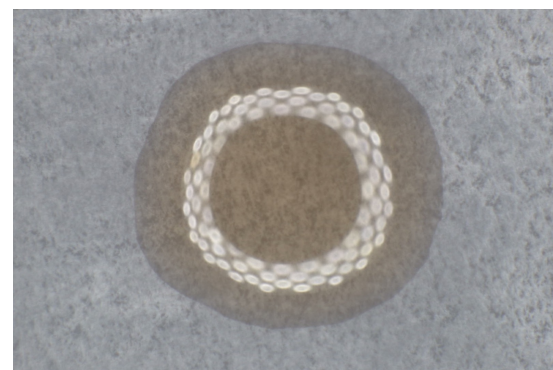


Stillwater
Laboratories

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

Sample Handling

concentrate



test ID	sample wt
type concentrate	order 7945
lab ID OGX02	sample date 7/29/2020
unit 30mL	unit weight 27.6 g

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 RTPCR
solvents	MSP-7.5.1.6 QP2020/HS20
metals	MSP-7.5.1.1 ICPMS2030

Potency	per	30mL	estimated error	Terpenes	%	estimated error	%	estimated error	%	estimated error
tetrahydrocannabinolic acid (THCa)	0%	0.0 mg	± 0.45 mg	terpenes not tested / not required						
Δ^9 -tetrahydrocannabinol (Δ^9 THC)	.27%	75.4 mg	± 1.42 mg							
Δ^8 -tetrahydrocannabinol (Δ^8 THC)	0%	0.0 mg	± 0.45 mg							
tetrahydrocannabivarin (THCv)	.15%	41.9 mg	± 1.10 mg							
cannabidiolic acid (CBDa)	0%	0.0 mg	± 0.45 mg							
cannabidiol (CBD)	10.01%	2762.0 mg	± 8.14 mg							
cannabidivarin (CBDv)	.06%	15.2 mg	± 0.75 mg							
cannabigerolic acid (CBGa)	0%	0.0 mg	± 0.45 mg							
cannabigerol (CBG)	0%	0.0 mg	± 0.45 mg							
cannabinol (CBN)	.08%	23.1 mg	± 0.87 mg							
cannabichromene (CBC)	.36%	100.0 mg	± 1.61 mg							

Pesticides (MT)

MT limit

OGX02

LOQ

Pesticides (other)

OGX02

LOQ

abamectin	0.00 ppm	<10ppb	acephate	0.00 ppm	<10ppb
acequinocyl	0.00 ppm	<10ppb	acetamiprid	0.00 ppm	<10ppb
bifenazate	0.00 ppm	<10ppb	aldicarb	0.00 ppm	<10ppb
bifenthrin	0.00 ppm	<10ppb	azoxystrobin	0.00 ppm	<10ppb
chlormequat cl.	0.00 ppm	<10ppb	boscalid	0.00 ppm	<10ppb
cyfluthrin	0.00 ppm	<80ppb	carbaryl	0.00 ppm	<10ppb
diaminozide	0.00 ppm	<10ppb	carbofuran	0.00 ppm	<10ppb
etoxazole	0.00 ppm	<10ppb	chloanthraniliprole	0.00 ppm	<10ppb
fenoxycarb	0.00 ppm	<10ppb	chlorpyrifos	0.00 ppm	<10ppb
imazalil	0.00 ppm	<10ppb	clofentezine	0.00 ppm	<10ppb
imidacloprid	0.00 ppm	<10ppb	cypermethrin	0.00 ppm	<10ppb
myclobutanil	0.00 ppm	<10ppb	diazinon	0.00 ppm	<10ppb
paclobutrazol	0.00 ppm	<10ppb	dichlorvos	0.00 ppm	<10ppb
pyrethrins	0.00 ppm	<10ppb	dimethoate	0.00 ppm	<10ppb
spinosad	0.00 ppm	<10ppb	etofenprox	0.00 ppm	<10ppb
spiromesifen	0.00 ppm	<10ppb	fenpyroximate	0.00 ppm	<10ppb
spirotetramat	0.00 ppm	<10ppb	flupyrifur	0.00 ppm	<10ppb
trifloxystrobin	0.00 ppm	<10ppb	flonicamid	0.00 ppm	<10ppb
			fludioxonil	0.00 ppm	<10ppb
			hexythiazox	0.00 ppm	<10ppb
			kresoxym-methyl	0.00 ppm	<10ppb
			malathion	0.00 ppm	<10ppb
			metalaxyl	0.00 ppm	<10ppb
			methiocarb	0.00 ppm	<10ppb
			methomyl	0.00 ppm	<10ppb
			oxamyl	0.00 ppm	<10ppb
			permethrins	0.00 ppm	<10ppb
			phosmet	0.00 ppm	<10ppb
			piperonyl butoxide	0.00 ppm	<10ppb
			prallethrin	0.00 ppm	<10ppb
			propiconazole	0.00 ppm	<10ppb
			pyridaben	0.00 ppm	<10ppb
			spiroxamine	0.00 ppm	<10ppb
			tebuconazole	0.00 ppm	<10ppb
			thiacloprid	0.00 ppm	<10ppb
			thiamethoxam	0.00 ppm	<10ppb

Toxic Metals

MT limit

OGX02

LOQ

arsenic	2 ppm	0.0 ppm	<10ppb
cadmium	4.1 ppm	0.0 ppm	<10ppb
lead	1.2 ppm	0.0 ppm	<10ppb
mercury	0.4 ppm	0.0 ppm	<10ppb

Microbial

MT limit

OGX02

LOQ

microbial not tested

Aflatoxin B1,B2,G1,G2	20 ppb	0 ppb	<20 ppb
Ochratoxin A	20 ppb	0 ppb	<20 ppb

Comments

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Certificate of Analysis

Sample Information

CTLA ID: 21700
Date Received: 9/29/2020
Sample Name: Organic FS MCT Key Lime 450 Packaging
Lot Number: 200921A
Customer:

Analysis	Method	MDL	Specification	Result	Units
Rapid Complete Micro					
Total Plate Count	USP <2021>	100	Report	<100	cfu/g
Total Coliforms	BAM CH.4	10	Report	<10	cfu/g
<i>E. coli</i>	USP <2022>		Report	Negative	
<i>Salmonella</i>	USP <2022>		Report	Negative	
<i>Staphylococcus aureus</i>	USP <2022>		Report	Negative	
Rapid Yeast and Mold	AOAC 997.02	10	Report	<10	cfu/g

10/1/2020
DATE


Quality Manager

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit.