



CERTIFICATE OF ANALYSIS

PRODUCT NAME: Certified Organic Joy Organics CBD Tincture - Orange
PRODUCT STRENGTH: 450 mg
FILL LOT NUMBER: 200924D
TINCTURE BATCH 201013G
BEST BY DATE: 03/15/2022
HEMP EXTRACT LOT **B0180-001**

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	Coconut and hemp, orange	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%)	488.4 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 10/27/2020
 Kei Horikawa Date
 Quality Control Manager

MCT Orange 450

Certificate of Analysis



total cannabinoids	Δ^9 -THC	THCa	total THC
17 mg	0.00 mg	0.00 mg	0.00 mg
per	CBD	CBDa	total CBD
mL	16.28 mg	0.00 mg	16.28 mg

Lot# 200924D

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



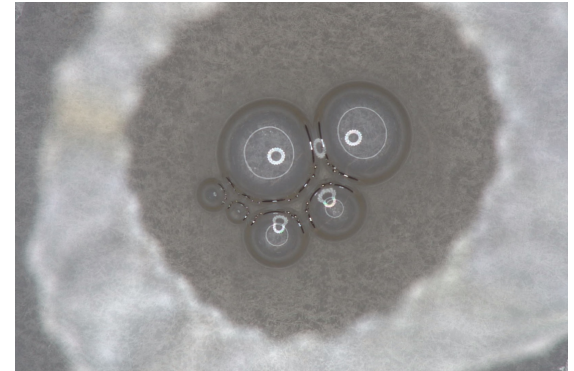
Stillwater Laboratories

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

Sample Handling

concentrate

test ID	sample wt
type concentrate	order 8558
lab ID OKE58	sample date 10/7/2020
unit mL	unit weight 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/Hardy
solvents	MSP-7.5.1.6 QP2020/HS20
metals	MSP-7.5.1.1 ICPMS2030

Potency	per mL	estimated error	Terpenes	%	estimated error	%	estimated error	%	estimated error
tetrahydrocannabinolic acid (THCa)	0%	0.00 mg	terpenes not tested / not required						
Δ^9 -tetrahydrocannabinol (Δ^9 THC)	0%	0.00 mg							
Δ^8 -tetrahydrocannabinol (Δ^8 THC)	0%	0.00 mg							
tetrahydrocannabivarin (THCv)	0%	0.00 mg							
cannabidiolic acid (CBDA)	0%	0.00 mg							
cannabidiol (CBD)	1.73%	16.28 mg							
cannabidivarin (CBDv)	0%	0.00 mg							
cannabigerolic acid (CBGa)	0%	0.00 mg							
cannabigerol (CBG)	.03%	0.33 mg							
cannabinol (CBN)	0%	0.00 mg							
cannabichromene (CBC)	0%	0.00 mg							

Solvents	MT limit	OKE58	LOQ	Pesticides (MT)	MT limit	OKE58	LOQ	Pesticides (other)	OKE58	LOQ
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pesticides
not tested / not required

not tested /
not required

Toxic Metals	MT limit	OKE58	LOQ
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metals
not tested / not required

Microbial	MT limit	OKE58	LOQ
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microbial not tested

Comments

Density = 0.94135mg/mL

• 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 = $\sum (\partial f / \partial i)^2 s_i^2$ where i is the contributor to error. The 95% confidence range is calculated from the equation: (concentration) \pm t_{CL90} x s_g. Sampling error is not

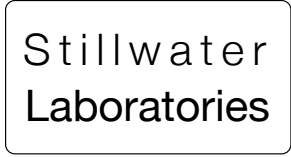
Certified by:

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



total CBD THC
 cannabinoids total 83.6% 0.0%
85.3% decarb total 83.44% 0%
 24273 Order# 8110

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



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

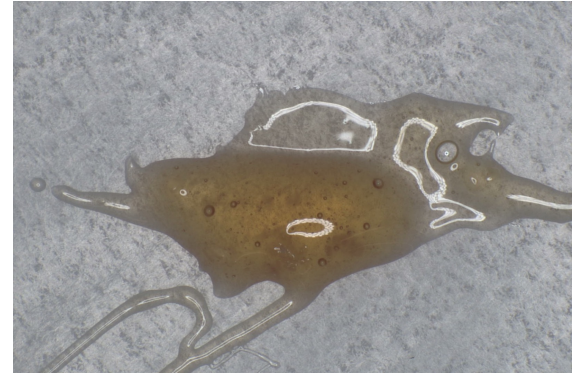
Sample Handling

test ID sample date 8/18/20 12:10 PM
 order 8110 labID OHL02 weight
 source

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
solvents MSP-7.5.1.6	QP2020/HS20
metals MSP-7.5.1.11	ICPMS2030

concentrate



Potency

	%	estimated error
tetrahydrocannabinolic acid (THCa)	0%	± 0.02 %
Δ ⁹ -tetrahydrocannabinol (Δ ⁹ THC)	0%	± 0.02 %
Δ ⁸ -tetrahydrocannabinol (Δ ⁸ THC)	0%	± 0.02 %
tetrahydrocannabivarin (THCv)	0%	± 0.02 %
cannabidiolic acid (CBDa)	1.11%	± 0.08 %
cannabidiol (CBD)	82.46%	± 0.72 %
cannabidivarin (CBDv)	.32%	± 0.05 %
cannabigerolic acid (CBGa)	0%	± 0.02 %
cannabigerol (CBG)	1.45%	± 0.10 %
cannabinol (CBN)	0%	± 0.02 %
cannabichromene (CBC)	0%	± 0.02 %

Terpenes

terpenes not tested / not required

Solvents

MT limit	OHL02	LOQ
propane 5,000	0 ppm	<10ppm
butanes 5,000	0 ppm	<10ppm
pentanes 5,000	0 ppm	<10ppm
hexanes 290	0 ppm	<10ppm
cyclohexane 3,880	0 ppm	<10ppm
heptanes 5,000	0 ppm	<10ppm
methanol 3,000	0 ppm	<10ppm
isopropanol 5,000	0 ppm	<10ppm
acetone 5,000	0 ppm	<10ppm
ethyl acetate 5,000	0 ppm	<10ppm
benzene 2	0 ppm	<0.2ppm
toluene 890	0 ppm	<10ppm
xylenes 2,170	0 ppm	<10ppm
chloroform 2	0 ppm	<0.2ppm
dichloromethane 600	0 ppm	<10ppm

Pesticides (MT)

MT limit	OHL02	LOQ
abamectin 0.00 ppm	<10ppb	
acequinocyl 0.00 ppm	<10ppb	
bifenazate 0.00 ppm	<10ppb	
bifenthrin 0.00 ppm	<10ppb	
chlormequat cl. 0.00 ppm	<10ppb	
cyfluthrin 0.00 ppm	<80ppb	
diaminozide 0.00 ppm	<10ppb	
etoxazole 0.00 ppm	<10ppb	
fenoxycarb 0.00 ppm	<10ppb	
imazalil 0.00 ppm	<10ppb	
imidacloprid 0.00 ppm	<10ppb	
myclobutanil 0.00 ppm	<10ppb	
paclobutrazol 0.00 ppm	<10ppb	
pyrethrins 0.00 ppm	<10ppb	
spinosad 0.00 ppm	<10ppb	
spiromesifen 0.00 ppm	<10ppb	
spirotetramat 0.00 ppm	<10ppb	
trifloxystrobin 0.00 ppm	<10ppb	

Pesticides (other)

OHL02	LOQ
acephate 0.00 ppm	<10ppb
acetamiprid 0.00 ppm	<10ppb
aldicarb 0.00 ppm	<10ppb
azoxystrobin 0.00 ppm	<10ppb
boscalid 0.00 ppm	<10ppb
carbaryl 0.00 ppm	<10ppb
carbofuran 0.00 ppm	<10ppb
chlorantraniliprole 0.00 ppm	<10ppb
chlorpyrifos 0.00 ppm	<10ppb
clofentezine 0.00 ppm	<10ppb
cypermethrin 0.00 ppm	<10ppb
diazinon 0.00 ppm	<10ppb
dichlorvos 0.00 ppm	<10ppb
dimethoate 0.00 ppm	<10ppb
etofenprox 0.00 ppm	<10ppb
fenpyroximate 0.00 ppm	<10ppb
fipronil 0.00 ppm	<10ppb
flonicamid 0.00 ppm	<10ppb
fludioxonil 0.01 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	OHL02	LOQ
arsenic 2 ppm	0.0 ppm	<10ppb
cadmium 0.8 ppm	0.0 ppm	<10ppb
lead 1.2 ppm	0.0 ppm	<10ppb
mercury 0.4 ppm	0.0 ppm	<10ppb

Microbial

microbial not tested

MT limit	OHL02	LOQ
Aflatoxin B1,B2,G1,G2 20 ppb	0 ppb	<20 ppb
Ochratoxin A 20 ppb	0 ppb	<20 ppb

Comments

Certified by:

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

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CTLA ID: 21984
 Date Received: 10/7/2020
 Sample Name: ORG BS MCT 450 Orange Formulation
 Lot Number: 200924D
 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

10/12/2020
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.

CTLA ID: 22369
 Date Received: 10/19/2020
 Sample Name: ORG BS MCT Orange 450 Packaging
 Lot Number: 201013G
 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

10/22/2020
DATE



Quality Manager

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