



JOY ORGANICS

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Certified Organic Joy Organics CBD Salve
PRODUCT STRENGTH: 500 mg
FILL LOT NUMBER: 20279-11
BEST BY DATE: 10/08/2022
HEMP EXTRACT LOT B0914--001

Click on the links to view third-party reports

Physical Attributes

Test	Method	Specification	Results
Color	SOP-100	Light off white to yellow opaque, hint of green	PASS
Odor	SOP-100	Lavender, eucalyptus, hint of beeswax and coconut	PASS
Appearance	SOP-100	Firm, semi-waxy salve in container with screw lid	PASS
Primary Package Eval.	SOP-132	Container clean and free of filth. Container caps tight and pressure seal 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	500- 650 mg CBD LOQ*: 10 PPM† (0.001%)	514.5 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 topicals, 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

10/20/2022

Date



total cannabinoids	Δ^9 -THC	THCa	total THC
527 mg	0.0 mg	0.0 mg	0.0 mg
per	CBD	CBDa	total CBD
ounce	514.5 mg	0.0 mg	514.5 mg

Lot# 20279-11

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

topical



test ID	sample wt	28.4 g
type	order	8571
lab ID	sample date	10/8/2020
unit	unit weight	28.4 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	ounce	estimated error	Terpenes	%	estimated error	%	estimated error	%	estimated error
tetrahydrocannabinolic acid (THCa)	0%	0.0 mg	± 0.47 mg	terpenes not tested / not required						
Δ^9 -tetrahydrocannabinol (Δ^9 THC)	0%	0.0 mg	± 0.47 mg							
Δ^8 -tetrahydrocannabinol (Δ^8 THC)	0%	0.0 mg	± 0.47 mg							
tetrahydrocannabivarin (THCv)	0%	0.0 mg	± 0.47 mg							
cannabidiolic acid (CBDA)	0%	0.0 mg	± 0.47 mg							
cannabidiol (CBD)	1.81%	514.5 mg	± 3.59 mg							
cannabidivarin (CBDv)	0%	0.0 mg	± 0.47 mg							
cannabigerolic acid (CBGA)	0%	0.0 mg	± 0.47 mg							
cannabigerol (CBG)	.05%	12.9 mg	± 0.73 mg							
cannabinol (CBN)	0%	0.0 mg	± 0.47 mg							
cannabichromene (CBC)	0%	0.0 mg	± 0.47 mg							

Solvents	MT limit	OKF98	LOQ	Pesticides (MT)	MT limit	OKF98	LOQ	Pesticides (other)	OKF98	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
				chloromequat 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	clofentazine	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	fipronil	0.00 ppm	<10ppb
				trifloxystrobin		0.00 ppm	<10ppb	flonicamid	0.00 ppm	<10ppb

Toxic Metals	MT limit	OKF98	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

Comments

Microbial	MT limit	OKF98	LOQ
<i>E. coli</i>	10 CFU	0 CFU	<10 CFU/g
Salmonella sp.	10 CFU	0 CFU	<10 CFU/g
molds	10000 CFU	0 CFU	<10k CFU/g
Aflatoxin B1,B2,G1,G2	20 ppb	0 ppb	<20 ppb
Ochratoxin A	20 ppb	0 ppb	<20 ppb

• 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}. •• Decarboxylated 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 $s_g^2 = \sum (\partial f / \partial i)^2 s_i^2$ where i is the contributor to error. The 95% confidence range is calculated from the equation: (concentration) ± 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@stlwlabs.com

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

B0914-001

Certificate of Analysis



total cannabinoids	CBD	THC
86.4%	total 84.4%	0.0%
24643	decarb total 84.23%	0%

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Complies with
7USC1639o(1)
Definition of
Hemp



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

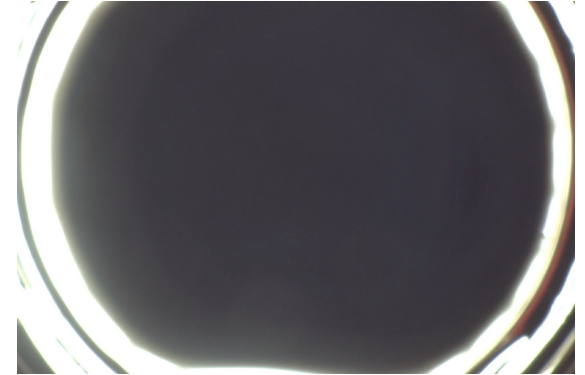
Sample Handling

test ID sample date 9/15/20 2:05 PM
order 8356 labID OJK39 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 RTPCR
solvents MSP-7.5.1.6	QP2020/HS20
metals MSP-7.5.1.11	ICPMS2030

concentrate



Potency	%	estimated error	Terpenes	%	estimated error	%	estimated error	%	estimated error
tetrahydrocannabinolic acid (THCa)	0%	± 0.02 %	terpenes not tested / not required						
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)	1.22%	± 0.09 %							
cannabidiol (CBD)	83.16%	± 0.74 %							
cannabidivarin (CBDv)	.51%	± 0.06 %							
cannabigerolic acid (CBGA)	0%	± 0.02 %							
cannabigerol (CBG)	1.51%	± 0.10 %							
cannabinol (CBN)	0%	± 0.02 %							
cannabichromene (CBC)	0%	± 0.02 %							

Solvents	MT limit	OJK39	LOQ	Pesticides (MT)	MT limit	OJK39	LOQ	Pesticides (other)	OJK39	LOQ
propane	5,000	PASS	<10ppm	abamectin	2.50 ppm	PASS	<10ppb	acephate	0.00 ppm	<10ppb
butanes	5,000	PASS	<10ppm	acequinocyl	10.00 ppm	PASS	<10ppb	acetamiprid	0.00 ppm	<10ppb
pentanes	5,000	PASS	<10ppm	bifenazate	1.00 ppm	PASS	<10ppb	aldicarb	0.00 ppm	<10ppb
hexanes	290	PASS	<10ppm	bifenthrin	1.00 ppm	PASS	<10ppb	azoxystrobin	0.00 ppm	<10ppb
cyclohexane	3,880	PASS	<10ppm	chlormequat cl.	5.00 ppm	PASS	<10ppb	boscalid	0.00 ppm	<10ppb
heptanes	5,000	PASS	<10ppm	cyfluthrin	5.00 ppm	PASS	<80ppb	carbaryl	0.00 ppm	<10ppb
methanol	3,000	PASS	<10ppm	diaminozide	5.00 ppm	PASS	<10ppb	carbofuran	0.00 ppm	<10ppb
isopropanol	5,000	PASS	<10ppm	etoxazole	1.00 ppm	PASS	<10ppb	chloanthraniliprole	0.00 ppm	<10ppb
acetone	5,000	PASS	<10ppm	fenoxycarb	1.00 ppm	PASS	<10ppb	chlorpyrifos	0.00 ppm	<10ppb
ethyl acetate	5,000	PASS	<10ppm	imazalil	1.00 ppm	PASS	<10ppb	clofentezine	0.00 ppm	<10ppb
benzene	2	PASS	<0.2ppm	imidacloprid	2.00 ppm	PASS	<10ppb	cypermethrin	0.00 ppm	<10ppb
toluene	890	PASS	<10ppm	myclobutanil	0.60 ppm	PASS	<10ppb	diazinon	0.00 ppm	<10ppb
xylenes	2,170	PASS	<10ppm	paclobutrazol	2.00 ppm	PASS	<10ppb	dichlorvos	0.00 ppm	<10ppb
chloroform	2	PASS	<0.2ppm	pyrethrins	5.00 ppm	PASS	<10ppb	dimethoate	0.00 ppm	<10ppb
dichloromethane	600	PASS	<10ppm	spinosad	1.00 ppm	PASS	<10ppb	etofenprox	0.00 ppm	<10ppb
acetonitrile	NA	N/A	<10ppm	spiromesifen	1.00 ppm	PASS	<10ppb	fenpyroximate	0.00 ppm	<10ppb
ethanol	NA	N/A	<10ppm	spirotetramat	1.00 ppm	PASS	<10ppb	fipronil	0.00 ppm	<10ppb
tetrahydrofuran	NA	N/A	<10ppm	trifloxystrobin	1.00 ppm	PASS	<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

• 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}. •• Decarboxylated 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

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microbial not tested

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