

CERTIFICATE OF ANALYSIS

PRODUCT NAME: CBD 2 oz Salve
PRODUCT STRENGTH: 1000 mg
LOT NUMBER: 1142020-1
BEST BY DATE: 10/16/2021
HEMP EXTRACT LOT [112619](#)

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	995-1025 mg CBD LOQ**: 10 PPM† (0.001%)	968mg	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 LOD	PASS
Microbial - Salmonella	SOP-111	Complies with USP 61/62	Below LOD	PASS
Microbial - Yeast and Mold	SOP-111	Complies with USP 61/62	Below LOD	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	Below LOQ	PASS

* Level of Quantitation, † Parts Per Million

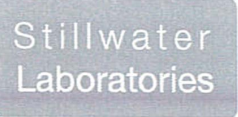
Quality Certified by: *Darcie Moran* 05/01/2020
 Darcie Moran Date
 Manager of Quality Assurance

Hemp Balm 2oz 1142020-1

Certificate of Analysis



total cannabinoids 511 mg per fl oz
delta-9-THC 0 mg
THCa 0 mg
total THC 0 mg
CBD 484 mg
CBDA 1 mg
total CBD 485 mg



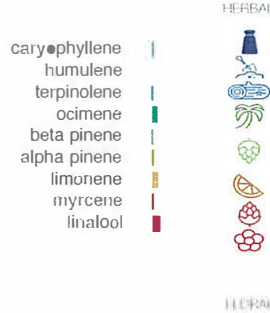
https://portal.a2la.org/scopepdf/4961-01.pdf

Sample Handling

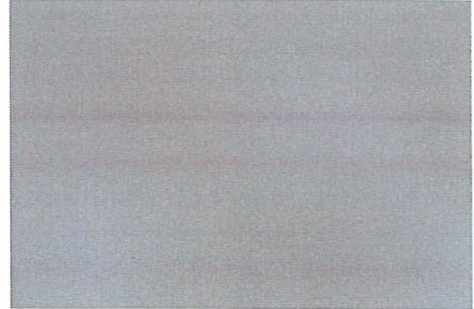
test ID sample wt 56.8 g
type topical order 7171
lab ID 0DZ64 sample date 4/30/2020
unit fl oz unit weight 27.0 g

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-7.5.1.9 Hardy Diag
solvents MSP-7.5.1.6 QP2020/HS20
metals MSP-7.5.1.1 ICPMS2030



topical



Potency

per fl oz estimated error
tetrahydrocannabinolic acid (THCa) 0% 0 mg ± 0.44 mg
delta-9-tetrahydrocannabinol (delta-9 THC) 0% 0 mg ± 0.44 mg
delta-8-tetrahydrocannabinol (delta-8 THC) 0% 0 mg ± 0.44 mg
tetrahydrocannabivarin (THCv) 0% 0 mg ± 0.44 mg
cannabidiolic acid (CBDA) 0% 1 mg ± 0.54 mg
cannabidiol (CBD) 1.79% 484 mg ± 8.07 mg
cannabidivarin (CBDv) 0% 1 mg ± 0.53 mg
cannabigerolic acid (CBGA) .02% 5 mg ± 0.91 mg
cannabigerol (CBG) .08% 21 mg ± 1.72 mg
cannabinol (CBN) 0% 0 mg ± 0.44 mg
cannabichromene (CBC) 0% 0 mg ± 0.44 mg

Terpenes

% estimated error
beta-myrcene 0.003% ± 0.0018%
beta-caryophyllene 0.001% ± 0.0017%
alpha-pinene 0.011% ± 0.0022%
beta-pinene 0.001% ± 0.0017%
D-limonene 0.041% ± 0.0032%
linalool 0.057% ± 0.0036%
ocimene 0.034% ± 0.0053%
terpinolene 0.000% ± 0.0017%
alpha-humulene 0.000% ± 0.0016%
camphene 0.000% ± 0.0017%
delta-3-carene 0.001% ± 0.0017%
a-terpinene 0.000% ± 0.0016%
para-cymene 0.000% ± 0.0016%
g-terpinene 0.003% ± 0.0018%
(-)-isopulegol 0.000% ± 0.0016%
geraniol 0.001% ± 0.0017%
cis-nerolidol 0.000% ± 0.0016%
trans-nerolidol 0.000% ± 0.0016%
guaiol 0.000% ± 0.0016%
beta-bisabolol 0.000% ± 0.0016%
eucalyptol 0.211% ± 0.0063%
total terpenes 0.37%

Solvents

MT limit 0DZ64 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 18 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 0DZ64 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
diaminazide 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)

0DZ64 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
carbopuran 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 0.00 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 0DZ64 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 0DZ64 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
Aflatoxin B1,B2,G1,G2 20 ppb 0 ppb <20 ppb
Ochratoxin A 20 ppb 0 ppb <20 ppb

Comments

Extraction using MSP-7.5.1.2b.concentrate. Assumed density 0.95.

All testing was completed onsite at 6073 US93N, Olney MT. Potency (cannabinoid concentration) is calculated from the equation: [cannabinoid] = [cannabinoid]HPLC x volumedilution / m.dry. Terpene concentration is calculated from the equation: [terpene] = (terpene mass)GCMS / m.dry. ... Decarboxyated cannabinoid concentration is calculated from the equation XXXtotal = 0.877 x XXXa + 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 s2 = sum (partial i)2 s2i where i is the contributor to error. The 95% confidence range is calculated from the equation: (concentration) ± tCL95 x Sg. Sampling error is not

Certified by:

Ron Brost

Ron Brost, PhD PEng (Chem) Director 6073 US93N, Olney MT 59927 406-881-2019 rdb@stlmlabs.com



total cannabinoids **84.7%**
 CBD decarb total 80.7%
 Δ9-THC ND

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



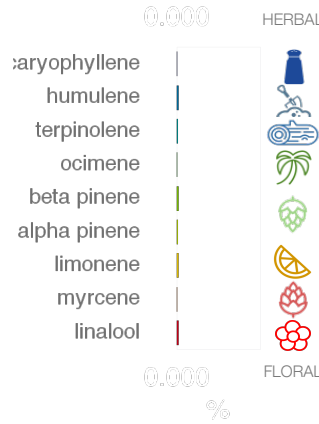
Stillwater Laboratories

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

Sample Handling

test ID sample date 2/24/20 4:49 PM
 order 6654 labID OBR66 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-7.5.1.9	Hardy Diag
solvents	MSP-7.5.1.6	QP2020/HS20
metals	MSP-7.5.1.10	ICPMS2030



concentrate



Potency	%	estimated error	Terpenes	%	estimated error	%	estimated error	%	estimated error		
tetrahydrocannabinolic acid (THCa)	ND	± 0.02 %	β-myrcene	0.001%	± 0.0017%	camphene	0.002%	± 0.0017%	guaiol	0.000%	± 0.0017%
Δ ⁹ -tetrahydrocannabinol (Δ ⁹ THC)	ND	± 0.02 %	β-caryophyllene	0.001%	± 0.0017%	Δ ³ -carene	0.003%	± 0.0018%	β-bisabolol	0.002%	± 0.0017%
Δ ⁸ -tetrahydrocannabinol (Δ ⁸ THC)	ND	± 0.02 %	alpha-pinene	0.005%	± 0.0018%	a-terpinene	0.000%	± 0.0016%	eucalyptol	0.005%	± 0.0018%
tetrahydrocannabivarin (THCv)	ND	± 0.02 %	β-pinene	0.008%	± 0.0019%	para-cymene	0.009%	± 0.0019%			
cannabidiolic acid (CBDa)	ND	± 0.02 %	D-limonene	0.009%	± 0.0019%	g-terpinene	0.010%	± 0.0019%			
cannabidiol (CBD)	80.7%	± 0.73 %	linalool	0.008%	± 0.0019%	(-)-isopulegol	0.000%	± 0.0016%	total terpenes		0.08%
cannabidivarin (CBDv)	ND	± 0.02 %	ocimene	0.002%	± 0.0034%	geraniol	0.002%	± 0.0017%			
cannabigerolic acid (CBGa)	ND	± 0.02 %	terpinolene	0.003%	± 0.0018%	cis-nerolidol	0.000%	± 0.0016%			
cannabigerol (CBG)	4.02%	± 0.16 %	alpha-humulene	0.007%	± 0.0019%	trans-nerolidol	0.004%	± 0.0018%			
cannabinol (CBN)	ND	± 0.02 %									
cannabichromene (CBC)	ND	± 0.02 %									

Solvents	MT limit	OBR66	LOQ	Pesticides (MT)	MT limit	OBR66	LOQ	Pesticides (other)	OBR66	LOQ
propane	5,000	0 ppm	<10ppm	abamectin	2.50 ppm	0.00 ppm	<10ppb	acephate	0.00 ppm	<10ppb
butanes	5,000	0 ppm	<10ppm	acequinocyl	10.00 ppm	0.00 ppm	<10ppb	acetamiprid	0.00 ppm	<10ppb
pentanes	5,000	0 ppm	<10ppm	bifenazate	1.00 ppm	0.00 ppm	<10ppb	aldicarb	0.00 ppm	<10ppb
hexanes	290	0 ppm	<10ppm	bifenthrin	1.00 ppm	0.00 ppm	<10ppb	azoxystrobin	0.00 ppm	<10ppb
cyclohexane	3,880	0 ppm	<10ppm	chlormequat cl.	5.00 ppm	0.00 ppm	<10ppb	boscalid	0.00 ppm	<10ppb
heptanes	5,000	0 ppm	<10ppm	cyfluthrin	5.00 ppm	0.00 ppm	<80ppb	carbaryl	0.00 ppm	<10ppb
methanol	3,000	0 ppm	<10ppm	diaminozide	5.00 ppm	0.00 ppm	<10ppb	carbofuran	0.00 ppm	<10ppb
isopropanol	5,000	0 ppm	<10ppm	etoxazole	1.00 ppm	0.00 ppm	<10ppb	chloantraniliprole	0.00 ppm	<10ppb
acetone	5,000	0 ppm	<10ppm	fenoxycarb	1.00 ppm	0.00 ppm	<10ppb	chlorpyrifos	0.00 ppm	<10ppb
ethyl acetate	5,000	0 ppm	<10ppm	imazalil	1.00 ppm	0.00 ppm	<10ppb	clofentezine	0.00 ppm	<10ppb
benzene	2	0 ppm	<0.2ppm	imidacloprid	2.00 ppm	0.00 ppm	<10ppb	cypermethrin	0.00 ppm	<10ppb
toluene	890	0 ppm	<10ppm	myclobutanil	0.60 ppm	0.00 ppm	<10ppb	diazinon	0.00 ppm	<10ppb
xylenes	2,170	0 ppm	<10ppm	paclobutrazol	2.00 ppm	0.00 ppm	<10ppb	dichlorvos	0.00 ppm	<10ppb
chloroform	2	0 ppm	<0.2ppm	pyrethrins	5.00 ppm	0.00 ppm	<10ppb	dimethoate	0.00 ppm	<10ppb
dichloromethane	600	0 ppm	<10ppm	spinosad	1.00 ppm	0.00 ppm	<10ppb	etofenprox	0.00 ppm	<10ppb
				spiromesifen	1.00 ppm	0.00 ppm	<10ppb	fenpyroximate	0.00 ppm	<10ppb
				spirotetramat	1.00 ppm	0.00 ppm	<10ppb	fipronil	0.00 ppm	<10ppb
				trifloxystrobin	1.00 ppm	0.00 ppm	<10ppb	flonicamid	0.00 ppm	<10ppb

Toxic Metals	MT limit	OBR66	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	MT limit	OBR66	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

Comments

• 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_y² = 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_y. Sampling error is not

Certified by:

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 Deputy Director
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 406-881-2019 rdb@stwlabs.com

Printed 3/4/2020 1:42 PM

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