

# CERTIFICATE OF ANALYSIS

**PRODUCT NAME:** CBD Tincture - Natural  
**PRODUCT STRENGTH:** 900 mg  
**LOT NUMBER:** 20LL123K11  
**BEST BY DATE:** 11/6/21  
**HEMP EXTRACT LOT** [112619](#)

\*Click on the links to view third party results\*

### 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
<b>Potency - Total CBD</b>	SOP-111	855-1,125 mg CBD LOQ**: 10 PPM† (0.001%)	<a href="#">995mg</a>	PASS
<b>Potency - D9-THC</b>	SOP-111	None Detected LOQ: 10 PPM (0.001%)	<a href="#">ND</a>	PASS
<b>Compliant Pesticide Panel</b>	SOP-111	WIP-100008 : Product specification for Tinctures, Oregon Action limits apply	<a href="#">ND</a>	PASS
<b>Microbial - Stec E.Coli</b>	SOP-111	Complies with USP 61/62	<a href="#">Below LOD</a>	PASS
<b>Microbial - Salmonella</b>	SOP-111	Complies with USP 61/62	<a href="#">Below LOD</a>	PASS
<b>Microbial - Yeast and Mold</b>	SOP-111	Complies with USP 61/62	<a href="#">Below LOD</a>	PASS
<b>CA Compliant Heavy Metal Panel</b>	SOP-111	Arsenic (As): ≤1.5 PPM Cadmium (Cd): ≤0.5 PPM Mercury (Hg): ≤1.0 PPM Lead (Pb): ≤0.5 PPM	<a href="#">ND</a>	PASS

\* Level of Quantitation, † Parts Per Million

Quality Certified by:

*Darcie Moran*

Darcie Moran  
Manager of Quality Assurance

05/20/2020

Date

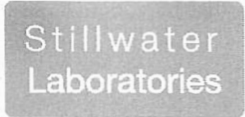
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Natural 900mg 20LL123K11

Certificate of Analysis



total cannabinoids	Δ9-THC	THCa	total THC
<b>1036 mg</b>	0 mg	0 mg	0 mg
per	CBD	CBDa	total CBD
<b>ounce</b>	995 mg	0 mg	995 mg



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

Sample Handling

test ID	5,6	sample wt	
type	tincture	order	7309
lab ID	0EP13	sample date	5/18/2020
unit	ounce	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-7.5.1.9	Hardy Diag
solvents	MSP-7.5.1.6	QP2020/HS20
metals	MSP-7.5.1.1	ICPMS2030

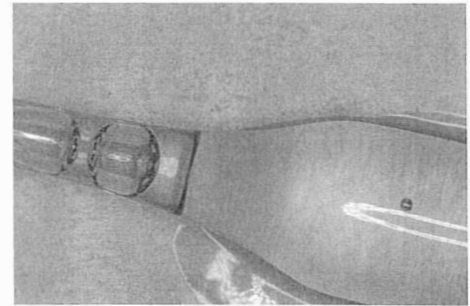
tincture

- caryophyllene
- humulene
- terpinolene
- ocimene
- beta pinene
- alpha pinene
- limonene
- myrcene
- linalool

HERBAL



FLORAL



Potency

	per	ounce	estimated error
tetrahydrocannabinolic acid (THCa)	0%	0 mg	± 0.45 mg
Δ <sup>9</sup> -tetrahydrocannabinol (Δ <sup>9</sup> THC)	0%	0 mg	± 0.45 mg
Δ <sup>8</sup> -tetrahydrocannabinol (Δ <sup>8</sup> THC)	0%	0 mg	± 0.45 mg
tetrahydrocannabivarin (THCv)	0%	0 mg	± 0.45 mg
cannabidiolic acid (CBDa)	0%	0 mg	± 0.45 mg
cannabidiol (CBD)	3.6%	995 mg	± 1.13 mg
cannabivarin (CBDv)	0%	0 mg	± 0.45 mg
cannabigerolic acid (CBGa)	0%	0 mg	± 0.45 mg
cannabigerol (CBG)	.15%	42 mg	± 0.50 mg
cannabinol (CBN)	0%	0 mg	± 0.45 mg
cannabichromene (CBC)	0%	0 mg	± 0.45 mg

Terpenes

	%	estimated error		%	estimated error		%	estimated error
β-myrcene	0.000%	± 0.0016%	camphene	0.000%	± 0.0016%	guaiol	0.000%	± 0.0016%
β-caryophyllene	0.000%	± 0.0016%	Δ <sup>3</sup> -carene	0.000%	± 0.0016%	β-bisabolol	0.000%	± 0.0016%
alpha-pinene	0.003%	± 0.0017%	a-terpinene	0.000%	± 0.0016%	eucalyptol	0.000%	± 0.0016%
β-pinene	0.000%	± 0.0016%	para-cymene	0.000%	± 0.0016%			
D-limonene	0.007%	± 0.0019%	g-terpinene	0.000%	± 0.0016%			
linalool	0.000%	± 0.0016%	(-)-isopulegol	0.000%	± 0.0016%			
ocimene	0.001%	± 0.0033%	geraniol	0.000%	± 0.0016%			
terpinolene	0.000%	± 0.0016%	cis-nerolidol	0.000%	± 0.0016%			
alpha-humulene	0.000%	± 0.0016%	trans-nerolidol	0.000%	± 0.0016%			
						total terpenes		0.01%

Solvents

	MT limit	0EP13	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	?	0 ppm	<0.2ppm
dichloromethane	600	0 ppm	<10ppm

Pesticides (MT)

	MT limit	0EP13	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
diaminooxide		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)

	0EP13	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
fenprophate	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	0EP13	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	0EP13	LOQ
<i>E. coli</i>	10 CFU	0 CFU	<10 CFU/g
<i>Salmonella</i> 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]<sub>HPLC</sub> × volume<sub>dilution</sub> / m<sub>dry</sub>. Terpene concentration is calculated from the equation: [terpene] = (terpene mass)<sub>GCMS</sub> / m<sub>dry</sub>. • Decarboxylated cannabinoid concentration is calculated from the equation XXX<sub>total</sub> = 0.877 × XXX<sub>a</sub> + 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<sub>p</sub><sup>2</sup> = ∑(∂f/∂i)<sup>2</sup>s<sub>i</sub><sup>2</sup> where i is the contributor to error. The 95% confidence range is calculated from the equation: (concentration) ± t<sub>c,90</sub> × s<sub>p</sub>. Sampling error is not

Certified by:

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