CERTIFICATE OF ANALYSIS

PRODUCT NAME:	CBD Cream
PRODUCT STRENGTH:	250 mg
BEST BY DATE:	11/24/2022
FILL LOT NUMBER:	20321-07
HEMP EXTRACT LOT:	B0914-001

Click on the links to view third party results

Physical Atttributes

Test	Method	Specification	Results
Color	SOP-100	Off-white to light cream	PASS
Odor	SOP-100	Neutral with light hemp/CBD oil scent	PASS
Appearance	SOP-100	Medium viscosity skin cream in white container with clear cap	PASS
Primary Package Eval.	SOP-132	Container clean and free of filth. Container caps tight and tamper-evident label 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	237.5-312.5 mg CBD LOQ**: 10 PPM† (0.001%)	306.5 mg	PASS
Potency - D9-THC	SOP-111	None Detected LOQ: 10 PPM (0.001%)	ND	PASS
FL Compliant Pesticide Panel	SOP-111	Florida State Hemp Program Rule 5B-57.014: Action Limits for Pesticides	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 - Aspergillus	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	Below LOQ	PASS

* Level of Quantitation, † Parts Per Million

Quality Certified by: Kei Horikawa 12/14/2020

Kei Horikawa
Quality Control Manager

Date

HPC250

Certificate of Analysis

total cannabinoids
317 mg
per
30mL

Δ9-THC	THCa	total THC
0.0 mg	0.0 mg	0.0 mg

CBD	CBDa	total CBD
306.5 mg	0.0 mg	306.5 mg

Lot/Batch# 20321-07

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

ISO/IEC 17025:2017
ACCREDITED
Certificate #4961.01

Stillwater Laboratories

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

Sample Handling

test ID		sample wt	118.0 g
type	topical	order	**8966**
lab ID	**0LR02**	sample date	11/19/2020
unit	30mL	unit weight	**28.5 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

topical

Potency

per 30mL			estimated error
tetrahydrocannabolic acid (THCa)	0%	0.0 mg	± 0.47 mg
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)	1.08%	306.5 mg	± 2.79 mg
cannabidivarin (CBDv)	0%	0.0 mg	± 0.47 mg
cannabigerolic acid (CBGa)	0%	0.0 mg	± 0.47 mg
cannabigerol (CBG)	.04%	10.3 mg	± 0.69 mg
cannabinol (CBN)	0%	0.0 mg	± 0.47 mg
cannabichromene (CBC)	0%	0.0 mg	± 0.47 mg

Terpenes

%	estimated error	%	estimated error	%	estimated error

terpenes
not tested / not required

Solvents

	MT limit	0LR02	LOQ

Toxic Metals

	MT limit	0LR02	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

Pesticides (MT)

	MT limit	0LR02	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)

	0LR02	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
chloantraniliprole	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

Microbial

	MT limit	0LR02	LOQ
E. coli	10 CFU	0 CFU	<10 CFU/g
Salmonella sp.	10 CFU	0 CFU	<10 CFU/g
molds	10000 CFU	10 CFU	<10k CFU/g
Aflatoxin B1,B2,G1,G2	20 ppb	0 ppb	<20 ppb
Ochratoxin A	20 ppb	0 ppb	<20 ppb

Comments

-Potency repeated with similar results
-Density 0.95g/mL

• All testing was completed onsite at 6073 US93N, Olney MT •• Potency (cannabinoid concentration) is calcuated from the equation: [cannabioid] = $[\text{cannabinoid}]_{HPLC}$ x $\text{volume}_{dilution}/m_{dry}$. Terpene concentration is calcuated from the equation: [terpene] = $(\text{terpene mass})_{GCMS}$ / m_{dry}. ••• Decarboxyted cannabinoid concentration is calculated from the equation XXX_{total} = 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 $s_g^2 = \sum(\partial f/\partial i)^2 s_i^2$ 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@stwlabs.com

B0914-001

Certificate of Analysis

total cannabinoids

86.4%

24643

	CBD	THC
total	84.4%	0.0%
decarb total	84.23%	0%

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

ISO/IEC 17025:2017

ACCREDITED

Certificate #4961.01

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

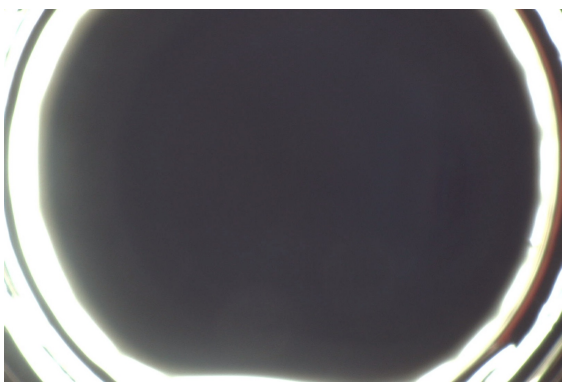
Stillwater Laboratories

Sample Handling

test ID
order **8356** labID **0JK39** weight
source

sample date 9/15/20 2:05 PM

concentrate



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

Potency

	%	estimated error
tetrahydrocannabolic 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)	1.22%	± 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 %

Terpenes

	%	estimated error	%	estimated error	%	estimated error

terpenes
not tested / not required

Solvents

	MT limit	0JK39	LOQ
propane	5,000	PASS	<10ppm
butanes	5,000	PASS	<10ppm
pentanes	5,000	PASS	<10ppm
hexanes	290	PASS	<10ppm
cyclohexane	3,880	PASS	<10ppm
heptanes	5,000	PASS	<10ppm
methanol	3,000	PASS	<10ppm
isopropanol	5,000	PASS	<10ppm
acetone	5,000	PASS	<10ppm
ethyl acetate	5,000	PASS	<10ppm
benzene	2	PASS	<0.2ppm
toluene	890	PASS	<10ppm
xylenes	2,170	PASS	<10ppm
chloroform	2	PASS	<0.2ppm
dichloromethane	600	PASS	<10ppm
acetonitrile	NA	N/A	<10ppm
ethanol	NA	N/A	<10ppm
tetrahydrofuran	NA	N/A	<10ppm

Pesticides (MT)

	MT limit	0JK39	LOQ
abamectin	2.50 ppm	PASS	<10ppb
acequinocyl	10.00 ppm	PASS	<10ppb
bifenazate	1.00 ppm	PASS	<10ppb
bifenthrin	1.00 ppm	PASS	<10ppb
chlormequat cl.	5.00 ppm	PASS	<10ppb
cyfluthrin	5.00 ppm	PASS	<80ppb
diaminozide	5.00 ppm	PASS	<10ppb
etoxazole	1.00 ppm	PASS	<10ppb
fenoxycarb	1.00 ppm	PASS	<10ppb
imazalil	1.00 ppm	PASS	<10ppb
imidacloprid	2.00 ppm	PASS	<10ppb
myclobutanil	0.60 ppm	PASS	<10ppb
paclobutrazol	2.00 ppm	PASS	<10ppb
pyrethrins	5.00 ppm	PASS	<10ppb
spinosad	1.00 ppm	PASS	<10ppb
spiromesifen	1.00 ppm	PASS	<10ppb
spirotetramat	1.00 ppm	PASS	<10ppb
trifloxystrobin	1.00 ppm	PASS	<10ppb

Pesticides (other)

	0JK39	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
chloantraniliprole	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	0JK39	LOQ
arsenic	2 ppm	PASS	<10ppb
cadmium	4.1 ppm	PASS	<10ppb
lead	1.2 ppm	PASS	<10ppb
mercury	0.4 ppm	PASS	<10ppb

Microbial

	MT limit	0JK39	LOQ

microbial not tested

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

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