# CERTIFICATE OF ANALYSIS

| | |
|---|---|
| **PRODUCT NAME:** | Certified Organic CBD Salve |
| **PRODUCT STRENGTH:** | 500 mg |
| **FILL LOT NUMBER:** | NA |
| **SALVE BATCH:** | 21082-05 |
| **BEST BY DATE:** | 03/27/2023 |
| **HEMP EXTRACT LOT** | **C0222-002** |

*Click on the links to view third-party reports*

*Physical Atttributes*

| Test | Method | Specification | Results |
|---|---|---|---|
| Color | SOP-100 | Off-white, cream color | PASS |
| Odor | SOP-100 | Neutral scent w/hint of hemp oil, sweet beeswax | PASS |
| Appearance | SOP-100 | Firm textured salve in white roll-on container with cap | 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 | 500-650mg CBD<br>LOQ**: 10 PPM† (0.001%) | **543.9 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<br>Cadmium (Cd): ≤0.5 PPM<br>Mercury (Hg): ≤1.0 PPM<br>Lead (Pb): ≤0.5 PPM | **ND** | PASS |

* *Level of Quantitation, † Parts Per Million

Quality Certified — Kei Horikawa — 04/07/2021

Kei Horikawa
Quality Control Manager

Date

# Salve 1oz OS1OZ500

Certificate of Analysis

total cannabinoids
**575 mg**
per
**ounce**

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

| CBD | CBDa | total CBD |
|---|---|---|
| 536.3 mg | 8.7 mg | 543.9 mg |

Lot# 21802-05 WO 055680

**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 | **10299.1.** | sample wt | 28.4 g |
| type | topical | order | **10299** |
| lab ID | **1DB23** | sample date | 4/1/2021 |
| unit | ounce | 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 |

topical

## Potency

| | per ounce | | estimated error |
|---|---|---|---|
| tetrahydrocannabolic acid (THCa) | 0% | 0.0 mg | ± 0.47 mg |
| $\Delta^9$-tetrahydrocannabinol ($\Delta^9$ THC) | 0% | 0.0 mg | ± 0.47 mg |
| $\Delta^8$-tetrahydrocannabinol ($\Delta^8$ THC) | 0% | 0.0 mg | ± 0.47 mg |
| tetrahydrocannabivarin (THCv) | 0% | 0.0 mg | ± 0.47 mg |
| cannabidiolic acid (CBDa) | .03% | 8.7 mg | ± 0.78 mg |
| cannabidiol (CBD) | 1.89% | 536.3 mg | ± 4.92 mg |
| cannabidivarin (CBDv) | 0% | 1.2 mg | ± 0.52 mg |
| cannabigerolic acid (CBGa) | .01% | 3.5 mg | ± 0.61 mg |
| cannabigerol (CBG) | .09% | 25.5 mg | ± 1.17 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 | 1DB23 | LOQ |
|---|---|---|---|

## Toxic Metals

| | MT limit | 1DB23 | 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

## Pesticides (MT)

| | MT limit | 1DB23 | 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 |

## Microbial

| | MT limit | 1DB23 | 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 |

## Pesticides (other)

| | 1DB23 | 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 |

• All testing was completed onsite at 6073 US93N, Olney MT •• Potency (cannabinoid concentration) is calcuated from the equation: [cannabioid] = $[\text{cannabinoid}]_{HPLC} \times \text{volume}_{dilution}/m_{dry}$. Terpene concentration is calcuated from the equation: [terpene] = $(\text{terpene mass})_{GCMS} / m_{dry}$. ••• Decarboxyted cannabinoid concentration is calculated from the equation $XXX_{total} = 0.877 \times XXXa + XXX$ •••• 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) $\pm t_{CL90} \times s_g$. Sampling error is not

Certified by:

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

# CO222-002

# 7USC1639 Certificate of Analysis

certificate ID
**1BU31**

man. date 2/24/2021

total cannabinoids **85.36%**

THC total ND  CBD total 80.02%  terpenes 0.073%

Stillwater Laboratories

order 9927
analysis date 2/24/2021 1:09:31 PM
test tag S1BXU
sample wgt 1.0 g

MSP-7.5.1.3

0.000

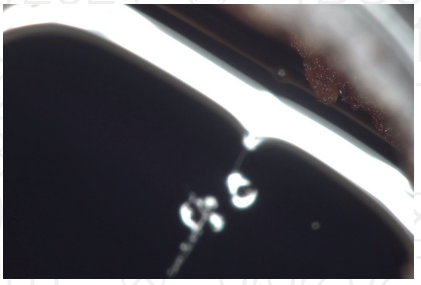
HERBAL

caryophyllene
humulene
terpinolene
ocimene
beta pinene
alpha pinene
limonene
myrcene
linalool

FLORAL

0.000

**extract**



## Inspection MSP-7.5.1.2

DESCRIPTION: Concentrate sample (1.00g) received in a client-labeled bottle, collected at dispensary/grow. 1 and sample tag S1BXU.

## Potency per MSP-7.5.1.4

| | | LOD | LOQ | error (95%CI k=2) |
|---|---|---|---|---|
| tetrahydrocannabolic acid (THCa) | ND | 0.002 | 0.005 | ±0.005% |
| Δ9-tetrahydrocannabinol (Δ9 THC) | ND | 0.001 | 0.004 | ±0.004% |
| Δ8-tetrahydrocannabinol (Δ8 THC) | ND | 0.002 | 0.006 | ±0.006% |
| tetrahydrocannabivarin (THCv) | ND | 0.002 | 0.005 | ±0.005% |
| cannabidiolic acid (CBDa) | ND | 0.001 | 0.004 | ±0.004% |
| cannabidiol (CBD) | 80.02% | 0.002 | 0.005 | ±1.920% |
| cannabidivarin (CBDv) | 0.06% | 0.001 | 0.004 | ±0.006% |
| cannabigerolic acid (CBGa) | ND | 0.001 | 0.004 | ±0.004% |
| cannabigerol (CBG) | 5.18% | <0.001 | 0.001 | ±0.125% |
| cannabinol (CBN) | ND | 0.001 | 0.002 | ±0.002% |
| cannabichromene (CBC) | 0.10% | 0.001 | 0.004 | ±0.007% |

## Terpenes MSP-7.5.1.6

| | | | |
|---|---|---|---|
| linalool | 0.010% | Δ3-carene | 0.035% |
| β-myrcene | ND | caryophyllene oxide | ND |
| D-limonene | ND | para-cymene | ND |
| α-pinene | ND | eucalyptol | ND |
| β-pinene | ND | geraniol | ND |
| ocimene | ND | guaiol | 0.015% |
| terpinolene | ND | isopulegol | ND |
| α-humulene | <LOQ | cis-nerolidol | ND |
| β-caryophyllene | <LOQ | trans-nerolidol | <LOQ |
| α-bisabolol | <LOQ | α-terpenine | ND |
| camphene | ND | γ-terpenine | ND |

‡ = decarbed NT = not tested NL = no limit, ND = not detected, LOD = detection limit , LOQ = quantitation limit

## Microbial MSP-7.5.1.10

| | | limit |
|---|---|---|
| E.coli | PASS | 0CFU |
| Salmonella sp. | PASS | 0CFU |
| molds | PASS | 10000CFU |
| Ochratoxin A | PASS | 20 ppb |
| Aflatoxin | PASS | 20 ppb |

## Solvents MSP-7.5.1.7

| | | limit |
|---|---|---|
| Acetone | PASS | 3100 ppm |
| Acetonitrile | PASS | 6 ppm |
| Benzene | PASS | 0 ppm |
| Butane | PASS | 5000 ppm |
| Chloroform | PASS | 0 ppm |
| Cyclohexane | PASS | 3880 ppm |
| Ethanol | PASS | 5000 ppm |
| Heptane | PASS | 5000 ppm |
| Hexane | PASS | 70 ppm |
| Isopropyl alcohol | PASS | 320 ppm |
| Methanol | PASS | 400 ppm |
| Pentane | PASS | 5000 ppm |
| Propane | PASS | 5000 ppm |
| Toluene | PASS | 30 ppm |
| Xylenes | PASS | 10 ppm |

## Metals MSP-7.5.1.11

| | | limit |
|---|---|---|
| Arsenic | PASS | 200 ppb |
| Cadmium | PASS | 200 ppb |
| Lead | PASS | 500 ppb |
| Mercury | PASS | 300 ppb |

## Pesticides MSP-7.5.1.8

| | | limit |
|---|---|---|
| Permethrin | PASS | 20.00 ppm |
| Phosmet | PASS | 0.20 ppm |
| Piperonylbutoxide | PASS | 8.00 ppm |
| Prallethrin | PASS | 0.40 ppm |
| Propiconazole | PASS | 20.00 ppm |
| Propoxur | PASS | 0.00 ppm |
| Pyrethrin | PASS | 1.00 ppm |
| Pyridaben | PASS | 3.00 ppm |
| Spinetoram | PASS | 3.00 ppm |
| Spinosad | PASS | 3.00 ppm |
| Spiromesifen | PASS | 12.00 ppm |
| Spirotetramat | PASS | 13.00 ppm |
| Spiroxamine | PASS | 0.00 ppm |
| Tebuconazole | PASS | 2.00 ppm |
| Thiacloprid | PASS | 0.10 ppm |
| Thiamethoxam | PASS | 4.50 ppm |
| Trifloxystrobin | PASS | 30.00 ppm |

## Pesticides MSP-7.5.1.8

| | | limit |
|---|---|---|
| Abamectin | PASS | 0.30 ppm |
| Acephate | PASS | 5.00 ppm |
| Acequinocyl | PASS | 4.00 ppm |
| Acetamiprid | PASS | 5.00 ppm |
| Aldicarb | PASS | 0.00 ppm |
| Azoxystrobin | PASS | 40.00 |
| Bifenazate | PASS | 5.00 ppm |
| Bifenthrin | PASS | 0.50 ppm |
| Boscalid | PASS | 10.00 |
| Carbaryl | PASS | 0.50 ppm |
| Carbofuran | PASS | 0.00 ppm |
| Chloantraniliprole | PASS | 40.00 |
| Chlorfenapyr | PASS | 0.00 ppm |
| Chlorpyrifos | PASS | 0.00 ppm |
| Clofentezine | PASS | 0.50 ppm |
| Coumaphos | PASS | 0.00 ppm |
| Cyfluthrin | PASS | 1.00 ppm |
| Cypermethrin | PASS | 1.00 ppm |
| Daminozide | PASS | 0.00 ppm |
| Dichlorvos | PASS | 0.00 ppm |
| Diazinon | PASS | 0.20 ppm |
| Dimethoate | PASS | 0.00 ppm |
| Etoxazole | PASS | 1.50 ppm |
| Fenoxycarb | PASS | 0.00 ppm |
| Fenpyroximate | PASS | 2.00 ppm |

## Pesticides MSP-7.5.1.8

| | | limit |
|---|---|---|
| Fipronil | PASS | 0.00 ppm |
| Flonicamid | PASS | 2.00 ppm |
| Fludioxonil | PASS | 30.00 |
| Hexythiazox | PASS | 2.00 ppm |
| Imazalil | PASS | 0.00 ppm |
| Imidacloprid | PASS | 3.00 ppm |
| Malathion | PASS | 5.00 ppm |
| Metalaxyl | PASS | 15.00 |
| Methiocarb | PASS | 0.00 ppm |
| Methomyl | PASS | 0.10 ppm |
| Methyl parathion | PASS | 0.00 ppm |
| Mevinphos | PASS | 0.00 ppm |
| Myclobutanil | PASS | 9.00 ppm |
| Naled | PASS | 0.50 ppm |
| Oxamyl | PASS | 0.20 ppm |
| Paclobutrazol | PASS | 0.00 ppm |
| Permethrin | PASS | 20.00 |

INSTRUMENTS
potency: HPLC (LC2030C-UV)
terpenes: GCMS (QP2020/HS20)
solvents: GCMS (QP2020/HS20)
pesticides: LCMSMS (LC8060)
mycotoxins: LCMSMS (LC8060)
microbial: qPCR (AriaMx) and plating
metals: ICPMS (ICPMS-2030)

SECURITY FEATURE: WATERMARK MUST MATCH CERTIFICATE ID AND ISSUE DATE

Certified by:

Justin M Johnston
Deputy Director

**Stillwater Laboratories Inc.**
MT License L00001, 7, 8
6073 US93N Suite 5
Olney MT 59927
406-881-2019

Printed
4/6/2021 12:10 PM



HEMP INDUSTRIES ASSOCIATION Member

ASA PFC Laboratory

ISO/IEC 17025:2017
ACCREDITED
Certificate #4961.01
https://portal.a2la.org/scopepdf/4961-01.pdf

# CERTIFICATE OF ANALYSIS

| | |
|---|---|
| **PRODUCT NAME:** | Certified Organic CBD Salve |
| **PRODUCT STRENGTH:** | 1000 mg |
| **FILL LOT NUMBER:** | NA |
| **SALVE BATCH:** | 21082-05 |
| **BEST BY DATE:** | 03/27/2023 |
| **HEMP EXTRACT LOT** | C0222-002 |

*Click on the links to view third-party reports*

*Physical Atttributes*

| Test | Method | Specification | Results |
|---|---|---|---|
| Color | SOP-100 | Off-white, cream color | PASS |
| Odor | SOP-100 | Neutral scent w/hint of hemp oil, sweet beeswax | PASS |
| Appearance | SOP-100 | Firm textured salve in white roll-on container with cap | 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 | 1000-1300mg CBD<br>LOQ**: 10 PPM† (0.001%) | **1122.3 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<br>Cadmium (Cd): ≤0.5 PPM<br>Mercury (Hg): ≤1.0 PPM<br>Lead (Pb): ≤0.5 PPM | **ND** | PASS |

* *Level of Quantitation, † Parts Per Million

Quality Certified — Kei Horikawa — 04/07/2021

Kei Horikawa
Quality Control Manager

Date

# Salve 2oz OS2OZ1000

# Certificate of Analysis

total cannabinoids
**1190 mg**
per
**2oz**

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

| CBD | CBDa | total CBD |
|---|---|---|
| 1106.5 mg | 18.1 mg | 1122.3 mg |

Lot# 21082-05 WO 055682

**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 | **10299.3.** | sample wt | |
| type | topical | order | **10299** |
| lab ID | **1DB25** | sample date | 4/1/2021 |
| unit | 2oz | unit weight | **56.8 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 2oz | | | estimated error |
|---|---|---|---|
| tetrahydrocannabolic acid (THCa) | 0% | 0.0 mg | ± 0.93 mg |
| $\Delta^9$-tetrahydrocannabinol ($\Delta^9$ THC) | 0% | 0.0 mg | ± 0.93 mg |
| $\Delta^8$-tetrahydrocannabinol ($\Delta^8$ THC) | 0% | 0.0 mg | ± 0.93 mg |
| tetrahydrocannabivarin (THCv) | 0% | 0.0 mg | ± 0.93 mg |
| cannabidiolic acid (CBDa) | .03% | 18.1 mg | ± 1.58 mg |
| cannabidiol (CBD) | 1.95% | 1106.5 mg | ± 9.99 mg |
| cannabidivarin (CBDv) | 0% | 2.1 mg | ± 1.03 mg |
| cannabigerolic acid (CBGa) | .01% | 8.3 mg | ± 1.27 mg |
| cannabigerol (CBG) | .1% | 54.6 mg | ± 2.40 mg |
| cannabinol (CBN) | 0% | 0.0 mg | ± 0.93 mg |
| cannabichromene (CBC) | 0% | 0.0 mg | ± 0.93 mg |

## Terpenes

| % | estimated error | % | estimated error | % | estimated error |
|---|---|---|---|---|---|

terpenes
not tested / not required

## Solvents

| | MT limit | 1DB25 | LOQ |
|---|---|---|---|

## Toxic Metals

| | MT limit | 1DB25 | 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

## Pesticides (MT)

| | MT limit | 1DB25 | 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 |

## Microbial

| | MT limit | 1DB25 | 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 |

## Pesticides (other)

| | 1DB25 | 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 |

• 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

# CO222-002

# 7USC1639 Certificate of Analysis

certificate ID
**1BU31**

man. date 2/24/2021

total cannabinoids **85.36%**

THC total ND  CBD total 80.02%  terpenes 0.073%

Stillwater Laboratories

order 9927
analysis date 2/24/2021 1:09:31 PM
test tag S1BXU
sample wgt 1.0 g

## Inspection MSP-7.5.1.2

DESCRIPTION: Concentrate sample (1.00g) received in a client-labeled bottle, collected at dispensary/grow. 1 and sample tag S1BXU.

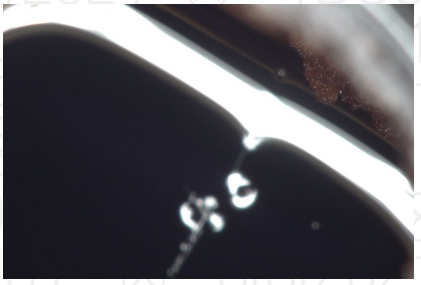
MSP-7.5.1.3

caryophyllene
humulene
terpinolene
ocimene
beta pinene
alpha pinene
limonene
myrcene
linalool

HERBAL

FLORAL

**extract**



## Potency per MSP-7.5.1.4

| | | LOD | LOQ | error (95%CI k=2) |
|---|---|---|---|---|
| tetrahydrocannabolic acid (THCa) | ND | 0.002 | 0.005 | ±0.005% |
| Δ9-tetrahydrocannabinol (Δ9 THC) | ND | 0.001 | 0.004 | ±0.004% |
| Δ8-tetrahydrocannabinol (Δ8 THC) | ND | 0.002 | 0.006 | ±0.006% |
| tetrahydrocannabivarin (THCv) | ND | 0.002 | 0.005 | ±0.005% |
| cannabidiolic acid (CBDa) | ND | 0.001 | 0.004 | ±0.004% |
| cannabidiol (CBD) | 80.02% | 0.002 | 0.005 | ±1.920% |
| cannabidivarin (CBDv) | 0.06% | 0.001 | 0.004 | ±0.006% |
| cannabigerolic acid (CBGa) | ND | 0.001 | 0.004 | ±0.004% |
| cannabigerol (CBG) | 5.18% | <0.001 | 0.001 | ±0.125% |
| cannabinol (CBN) | ND | 0.001 | 0.002 | ±0.002% |
| cannabichromene (CBC) | 0.10% | 0.001 | 0.004 | ±0.007% |

## Terpenes MSP-7.5.1.6

| | | | |
|---|---|---|---|
| linalool | 0.010% | Δ3-carene | 0.035% |
| β-myrcene | ND | caryophyllene oxide | ND |
| D-limonene | ND | para-cymene | ND |
| α-pinene | ND | eucalyptol | ND |
| β-pinene | ND | geraniol | ND |
| ocimene | ND | guaiol | 0.015% |
| terpinolene | ND | isopulegol | ND |
| α-humulene | <LOQ | cis-nerolidol | ND |
| β-caryophyllene | <LOQ | trans-nerolidol | <LOQ |
| α-bisabolol | <LOQ | α-terpenine | ND |
| camphene | ND | γ-terpenine | ND |

‡ = decarbed NT = not tested NL = no limit, ND = not detected, LOD = detection limit , LOQ = quantitation limit

## Microbial MSP-7.5.1.10

| | | limit |
|---|---|---|
| E.coli | PASS | 0CFU |
| Salmonella sp. | PASS | 0CFU |
| molds | PASS | 10000CFU |
| Ochratoxin A | PASS | 20 ppb |
| Aflatoxin | PASS | 20 ppb |

## Solvents MSP-7.5.1.7

| | | limit |
|---|---|---|
| Acetone | PASS | 3100 ppm |
| Acetonitrile | PASS | 6 ppm |
| Benzene | PASS | 0 ppm |
| Butane | PASS | 5000 ppm |
| Chloroform | PASS | 0 ppm |
| Cyclohexane | PASS | 3880 ppm |
| Ethanol | PASS | 5000 ppm |
| Heptane | PASS | 5000 ppm |
| Hexane | PASS | 70 ppm |
| Isopropyl alcohol | PASS | 320 ppm |
| Methanol | PASS | 400 ppm |
| Pentane | PASS | 5000 ppm |
| Propane | PASS | 5000 ppm |
| Toluene | PASS | 30 ppm |
| Xylenes | PASS | 10 ppm |

## Metals MSP-7.5.1.11

| | | limit |
|---|---|---|
| Arsenic | PASS | 200 ppb |
| Cadmium | PASS | 200 ppb |
| Lead | PASS | 500 ppb |
| Mercury | PASS | 300 ppb |

## Pesticides MSP-7.5.1.8

| | | limit |
|---|---|---|
| Permethrin | PASS | 20.00 ppm |
| Phosmet | PASS | 0.20 ppm |
| Piperonylbutoxide | PASS | 8.00 ppm |
| Prallethrin | PASS | 0.40 ppm |
| Propiconazole | PASS | 20.00 ppm |
| Propoxur | PASS | 0.00 ppm |
| Pyrethrin | PASS | 1.00 ppm |
| Pyridaben | PASS | 3.00 ppm |
| Spinetoram | PASS | 3.00 ppm |
| Spinosad | PASS | 3.00 ppm |
| Spiromesifen | PASS | 12.00 ppm |
| Spirotetramat | PASS | 13.00 ppm |
| Spiroxamine | PASS | 0.00 ppm |
| Tebuconazole | PASS | 2.00 ppm |
| Thiacloprid | PASS | 0.10 ppm |
| Thiamethoxam | PASS | 4.50 ppm |
| Trifloxystrobin | PASS | 30.00 ppm |

## Pesticides MSP-7.5.1.8

| | | limit |
|---|---|---|
| Abamectin | PASS | 0.30 ppm |
| Acephate | PASS | 5.00 ppm |
| Acequinocyl | PASS | 4.00 ppm |
| Acetamiprid | PASS | 5.00 ppm |
| Aldicarb | PASS | 0.00 ppm |
| Azoxystrobin | PASS | 40.00 |
| Bifenazate | PASS | 5.00 ppm |
| Bifenthrin | PASS | 0.50 ppm |
| Boscalid | PASS | 10.00 |
| Carbaryl | PASS | 0.50 ppm |
| Carbofuran | PASS | 0.00 ppm |
| Chloantraniliprole | PASS | 40.00 |
| Chlorfenapyr | PASS | 0.00 ppm |
| Chlorpyrifos | PASS | 0.00 ppm |
| Clofentezine | PASS | 0.50 ppm |
| Coumaphos | PASS | 0.00 ppm |
| Cyfluthrin | PASS | 1.00 ppm |
| Cypermethrin | PASS | 1.00 ppm |
| Daminozide | PASS | 0.00 ppm |
| Dichlorvos | PASS | 0.00 ppm |
| Diazinon | PASS | 0.20 ppm |
| Dimethoate | PASS | 0.00 ppm |
| Etoxazole | PASS | 1.50 ppm |
| Fenoxycarb | PASS | 0.00 ppm |
| Fenpyroximate | PASS | 2.00 ppm |

## Pesticides MSP-7.5.1.8

| | | limit |
|---|---|---|
| Fipronil | PASS | 0.00 ppm |
| Flonicamid | PASS | 2.00 ppm |
| Fludioxonil | PASS | 30.00 |
| Hexythiazox | PASS | 2.00 ppm |
| Imazalil | PASS | 0.00 ppm |
| Imidacloprid | PASS | 3.00 ppm |
| Malathion | PASS | 5.00 ppm |
| Metalaxyl | PASS | 15.00 |
| Methiocarb | PASS | 0.00 ppm |
| Methomyl | PASS | 0.10 ppm |
| Methyl parathion | PASS | 0.00 ppm |
| Mevinphos | PASS | 0.00 ppm |
| Myclobutanil | PASS | 9.00 ppm |
| Naled | PASS | 0.50 ppm |
| Oxamyl | PASS | 0.20 ppm |
| Paclobutrazol | PASS | 0.00 ppm |
| Permethrin | PASS | 20.00 |

INSTRUMENTS
potency: HPLC (LC2030C-UV)
terpenes: GCMS (QP2020/HS20)
solvents: GCMS (QP2020/HS20)
pesticides: LCMSMS (LC8060)
mycotoxins: LCMSMS (LC8060)
microbial: qPCR (AriaMx) and plating
metals: ICPMS (ICPMS-2030)

SECURITY FEATURE: WATERMARK MUST MATCH CERTIFICATE ID AND ISSUE DATE

Certified by:

Justin M Johnston
Deputy Director

**Stillwater Laboratories Inc.**
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Olney MT 59927
406-881-2019

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