# CERTIFICATE OF ANALYSIS

| | |
|---|---|
| **PRODUCT NAME:** | CBD Tincture - Mint |
| **PRODUCT STRENGTH:** | 900 mg |
| **LOT NUMBER:** | 20LL042A11 |
| **BEST BY DATE:** | 7/28/21 |
| **HEMP EXTRACT LOT NUMBER*:** | 110419 |

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

*Physical Atttributes*

| Test | Method | Specification | Results |
|---|---|---|---|
| Color | SOP-100 | Golden to Amber | PASS |
| Odor | SOP-100 | Characteristic - Olive and hemp, minty | 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 ba intact | PASS |
| Secondary Package Eval. | SOP-132 | Labeling Compliance Checked, Cartons sturdy and clean. Sufficie cushion material exists. Box taped and secure. | PASS |

*Review of Third-Party Analysis*

| Panel | Method | Specification | Results | Pass/Fail |
|---|---|---|---|---|
| **Potency** - Total CBD | SOP-111 | 855-1125 mg CBD<br>LOQ**: 10 PPM† (0.001%) | 916.3mg | 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 | >LOD | PASS |
| **Microbial** - Salmonella | SOP-111 | Complies with USP 61/62 | >LOD | PASS |
| **Microbial** - Mold | SOP-111 | Complies with USP 61/62 | >LOD | 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 | >LOQ | PASS |

* Level of Quantitation, † Parts Per Million

Quality Certified by: Darcie Moran 03.05.2020

Darcie Moran — Date

Manager of Quality Assurance

# 20LL042A11 CtM 900mg

# Certificate of Analysis

| total cannabinoids | Δ9-THC | THCa | total THC |
|---|---|---|---|
| 961.5 mg per ounce | ND | ND | 0 mg |
| | CBD | CBDa | total CBD |
| | 916.3 mg | 2 mg | 916.3 mg |

ISO/IEC 17025:2017
ACCREDITED
Certificate #4961.01

Stillwater Laboratories

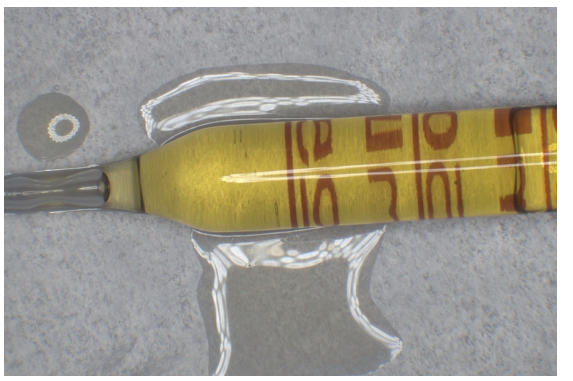
https://portal.a2la.org/scopepdf/4961-01.pdf

## Sample Handling

| | | | |
|---|---|---|---|
| test ID | | sample wt | |
| type | | order | **6598** |
| lab ID | **0BM64** | sample date | 2/18/2020 |
| 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 |



## Potency

| | per | ounce | estimated error |
|---|---|---|---|
| tetrahydrocannabolic acid (THCa) | ND | ND | ± 0.45 mg |
| $\Delta^9$-tetrahydrocannabinol ($\Delta^9$THC) | ND | ND | ± 0.45 mg |
| $\Delta^8$-tetrahydrocannabinol ($\Delta^8$THC) | ND | ND | ± 0.45 mg |
| tetrahydrocannabivarin (THCv) | ND | ND | ± 0.45 mg |
| cannabidiolic acid (CBDa) | .01% | 2 mg | ± 0.52 mg |
| cannabidiol (CBD) | 3.32% | 916.3 mg | ± 5.39 mg |
| cannabidivarin (CBDv) | .01% | 3.3 mg | ± 0.56 mg |
| cannabigerolic acid (CBGa) | ND | ND | ± 0.45 mg |
| cannabigerol (CBG) | .12% | 32.8 mg | ± 1.11 mg |
| cannabinol (CBN) | .02% | 6.7 mg | ± 0.65 mg |
| cannabichromene (CBC) | 0% | .4 mg | ± 0.47 mg |

## Terpenes

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

terpenes
not tested / not required

## Solvents

| | MT limit | 0BM64 | LOQ |
|---|---|---|---|

solvents
not tested / not required

## Toxic Metals

| | MT limit | 0BM64 | 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 | 0BM64 | 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 | 0BM64 | 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)

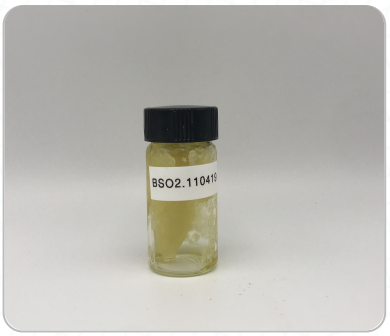
| | 0BM64 | LOQ |
|---|---|---|
| acephate | 0.00 ppm | <10ppb |
| acetamiprid | 0.00 ppm | <10ppb |
| aldicarb | 0.00 ppm | <10ppb |
| azoxystrobin | 0.00 ppm | <10ppb |
| boscalid | 0.00 ppm | <10ppb |
| carbaryl | 0.00 ppm | <10ppb |
| carbofuran | 0.00 ppm | <10ppb |
| chloantraniliprole | 0.00 ppm | <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

**Order #:** 40909
**Order Name:** BSO2.110419
**Batch #:** BSO2.110419
**Complete:** 11/08/2019




| N/D | 83.965% |
|---|---|
| D9-THC | Total CBD |

- Delta-9-Tetrahydrocannabinol 0%
- Tetrahydrocannabinolic Acid 0%
- Cannabidiol 84%
- Cannabidiolic Acid 0%
- Cannabidivarin 1%
- Cannabichromene 0%
- Cannabinol 0%
- Cannabigerol 4%
- Cannabigerolic Acid 0%
- Delta-8-Tetrahydrocannabinol 0%
- Tetrahydrocannabivarin 0%

## Cannabinoids

| | LOQ | weight(%) | mg/g |
|---|---|---|---|
| D9-THC | < 0.05% | N/D | N/D |
| THCA | < 0.05% | N/D | N/D |
| CBD | < 0.05% | < 83.96% | < 839.65 |
| CBDA | < 0.01% | N/D | N/D |
| CBDV | < 0.01% | < 0.23% | < 2.30 |
| CBC | < 0.01% | N/D | N/D |
| CBN | < 0.01% | N/D | N/D |
| CBG | < 0.01% | < 3.41% | < 34.09 |
| CBGA | < 0.01% | N/D | N/D |
| D8-THC | < 0.05% | N/D | N/D |
| THCV | < 0.05% | N/D | N/D |
| TOTAL D9-THC | N/A | < N/D | < N/D |
| TOTAL CBD* | N/A | < 83.965% | < 839.655 |
| TOTAL CANNABINOIDS | N/A | < 87.606% | < 876.056 |

## Metal

| | Action Level | Result |
|---|---|---|
| ARSENIC (AS) | 200 | B/LOQ |
| CADMIUM (CD) | 200 | B/LOQ |
| MERCURY (HG) | 100 | B/LOQ |
| LEAD (PB) | 500 | B/LOQ |

Limit of Quantitation (LOQ) is 85 ppb

## Residual Solvents

| Solvent Name | Action Level | Results | LOQ |
|---|---|---|---|
| ACETONE | 5,000 | N/D | 280 |
| ACETONITRILE | 410 | N/D | 50 |
| BENZENE | 1 | N/D | 1 |
| BUTANE | 5,000 | N/D | 100 |
| CHLOROFORM | 1 | N/D | 1 |
| DICHLOROETHANE | 1 | N/D | 1 |
| DICHLOROMETHANE | 1 | N/D | 1 |
| ETHANOL | 5,000 | N/D | 280 |
| ETHYL ACETATE | 5,000 | N/D | 280 |
| ETHYL ETHER | 5,000 | N/D | 280 |

| Solvent Name | Action Level | Results | LOQ |
|---|---|---|---|
| ISOPROPYL ALCOHOL | 5,000 | N/D | 280 |
| METHANOL | 3,000 | N/D | 200 |
| N-HEPTANE | 5,000 | N/D | 280 |
| N-HEXANE | 290 | N/D | 36 |
| PENTANE | 5,000 | N/D | 280 |
| PROPANE | 5,000 | N/D | 40 |
| TOLUENE | 890 | N/D | 106 |
| TRICHLOROETHENE | 1 | N/D | 0 |
| XYLENES | 2,170 | N/D | 260 |

## Pesticide

| Pesticide Name | Action Level | Results | LOQ |
|---|---|---|---|
| ABAMECTIN B1A | 0.100 | N/D | 0.02 |
| ACEPHATE | 0.100 | N/D | 0.004 |
| ACEQUINOCYL | 0.100 | N/D | 0.004 |
| ACETAMIPRID | 0.100 | N/D | 0.02 |
| ALDICARB | 0.100 | N/D | 0.02 |
| AZOXYSTROBIN | 0.100 | N/D | 0.004 |
| BIFENAZATE | 0.100 | N/D | 0.02 |
| BIFENTHRIN | 3.000 | N/D | 0.02 |
| BOSCALID | 0.100 | N/D | 0.02 |
| CARBARYL | 0.500 | N/D | 0.012 |
| CARBOFURAN | 0.100 | N/D | 0.004 |
| CHLORANTRANILIPROLE | 10.000 | N/D | 0.02 |
| CHLORPYRIFOS | 0.100 | N/D | 0.004 |
| CLOFENTEZINE | 0.100 | N/D | 0.004 |
| DAMINOZIDE | 0.100 | N/D | 0.02 |
| DIAZANON | 0.100 | N/D | 0.004 |
| DICHLORVOS | 0.100 | N/D | 0.02 |
| DIMETHOATE | 0.100 | N/D | 0.004 |
| DIMETHOMORPH | 2.000 | N/D | 0.02 |

| Pesticide Name | Action Level | Results | LOQ |
|---|---|---|---|
| ETHOPROPHOS | 0.100 | N/D | 0.004 |
| ETOFENPROX | 0.100 | N/D | 0.004 |
| ETOXAZOLE | 0.100 | N/D | 0.04 |
| FENHEXAMID | 0.100 | N/D | 0.02 |
| FENOXYCARB | 0.100 | N/D | 0.02 |
| FENPYROXIMATE | 0.100 | N/D | 0.004 |
| FIPRONIL | 0.100 | N/D | 0.012 |
| FLONICAMID | 0.100 | N/D | 0.05 |
| FLUDIOXONIL | 0.100 | N/D | 0.012 |
| HEXYTHIAZOX | 0.100 | N/D | 0.02 |
| IMAZALIL | 0.100 | N/D | 0.02 |
| IMIDACLOPRID | 5.000 | N/D | 0.02 |
| KRESOXIM-METHYL | 0.100 | N/D | 0.04 |
| MALATHION | 0.500 | N/D | 0.02 |
| METALAXYL | 2.000 | N/D | 0.004 |
| METHIOCARB | 0.100 | N/D | 0.02 |
| METHOMYL | 1.000 | N/D | 0.004 |
| MEVINPHOS | 0.100 | N/D | 0.004 |
| MYCLOBUTANIL | 0.100 | N/D | 0.02 |

| Pesticide Name | Action Level | Results | LOQ |
|---|---|---|---|
| NALED | 0.100 | N/D | 0.02 |
| OXAMYL | 0.500 | N/D | 0.004 |
| PACLOBUTRAZOL | 0.100 | N/D | 0.02 |
| PERMETHRINS | 0.500 | N/D | 0.02 |
| PHOSMET | 0.100 | N/D | 0.02 |
| PRALLETHRIN | 0.100 | N/D | 0.02 |
| PROPICONAZOLE | 0.100 | N/D | 0.04 |
| PROPOXUR | 0.100 | N/D | 0.004 |
| PYRETHRINS (PYRETHRIN I) | 0.500 | N/D | 0.02 |
| PYRIDABEN | 0.100 | N/D | 0.02 |
| SPINETORAM | 0.100 | N/D | 0.004 |
| SPINOSAD | 0.100 | N/D | 0.004 |
| SPIROMESIFEN | 0.100 | N/D | 0.02 |
| SPIROTETRAMAT | 0.100 | N/D | 0.004 |
| SPIROXAMINE | 0.100 | N/D | 0.004 |
| TEBUCONAZOLE | 0.100 | B/LOQ | 0.02 |
| THIACLOPRID | 0.100 | N/D | 0.004 |
| THIAMETHOXAM | 5.000 | N/D | 0.004 |
| TRIFLOXYSTROBIN | 0.100 | N/D | 0.004 |

**Green Scientific Labs**
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