CERTIFICATE OF ANALYSIS

PRODUCT NAME: CBD Tincture - Mint

PRODUCT STRENGTH: 450 mg
LOT NUMBER: 20LL041K11

 BEST BY DATE:
 7/27/21

 HEMP EXTRACT LOT NUMBER*:
 092519.A

Click on the links to view third-party reports

Physical Attributes

| 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 baintact | 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 | 427.5-562.2 mg CBD LOQ**: 10 PPM† (0.001%) | <u>479.4</u> | PASS |
| Potency - D9-THC | SOP-111 | None Detected LOQ: 10 PPM (0.001%) | <u>ND</u> | PASS |
| FL Compliant Pesticide Panel | SOP-111 | WIP-100008 : Product specification for Tincture, 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 - Aspergillus | 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

Date

Date

Manager of Quality Assurance



Order #: 47908 Order Name: 450.Mint.041 Batch#: 20LL041K11 Received: 02/03/2020 Completed: 02/04/2020



Sample



N/D D9-THC 1.691% Total CBD

490.2 mg Cannabinoids per bottle

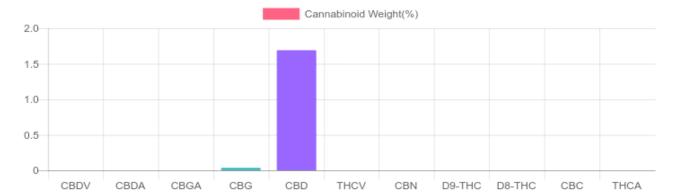
479.4 mg CBD per bottle

1 bottle = 30 ml per bottle x density (0.945) x Cannabinoid concentration

Cannabinoids Test

SHIMADZU INTEGRATED UPLC-PDA

| GSL SOP 400 | | | UPLOADED: 02 | 2/04/2020 11:37:32 |
|--------------------|--------|-----------|--------------|--------------------|
| Cannabinoids | LOQ | weight(%) | mg/g | mg/bottle |
| D9-THC | 10 PPM | N/D | N/D | N/D |
| THCA | 10 PPM | N/D | N/D | N/D |
| CBD | 10 PPM | 1.691% | 16.911 | 479.4 |
| CBDA | 20 PPM | N/D | N/D | N/D |
| CBDV | 20 PPM | N/D | N/D | N/D |
| CBC | 10 PPM | N/D | N/D | N/D |
| CBN | 10 PPM | N/D | N/D | N/D |
| CBG | 10 PPM | 0.038% | 0.380 | 10.8 |
| CBGA | 20 PPM | N/D | N/D | N/D |
| D8-THC | 10 PPM | N/D | N/D | N/D |
| THCV | 10 PPM | N/D | N/D | N/D |
| TOTAL D9-THC | | N/D | N/D | N/D |
| TOTAL CBD* | | 1.691% | 16.911 | 479.4 |
| TOTAL CANNABINOIDS | | 1.729% | 17.291 | 490.2 |



Reporting Limit 10 ppm *Total CBD = CBD + CBDA x 0.877

N/D - Not Detected, B/LOQ - Below Limit of Quantification

Dr. Andrew Hall, Ph.D., Chief Scientific Officer

Ben Witten, MS, MT., Lab Director

Green Scientific Labs info@greenscientificlabs.com 1-833 TEST CBD















Pesticides (other)

acephate

aldicarb

boscalid

carbaryl

carbofuran

chlorpyrifos

clofentezine

cypermethrin

diazinon

dichlorvos

dimethoate

etofenprox

flonicamid

fludioxonil

malathion

metalaxyl

methomyl

oxamyl

phosmet

prallethrin

pyridaben

spiroxamine

thiacloprid

tebuconazole

thiamethoxam

propiconazole

methiocarb

permethrins

piperonyl butoxide

hexythiazox

kresoxym-methyl

fipronil

fenpyroximate

chloantraniliprole

acetamiprid

azoxystrobin

0BM63

0.00 ppm

0.00 ppm <10ppb

LOQ

<10ppb



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

Sample Handling

sample date 2/18/20 9:48 AM labID **0BM63** order 6598 weiaht

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 |

estimated estimated estimated estimated Potency **Terpenes**

potency not tested terpenes not tested / not required

| Solvents | MT li | mit 0B | M63 | LOQ | Pesticides (MT) | MT limit | 0BM63 | LOQ |
|--------------|----------------|---------|-------|-----|-----------------------|-----------|----------|------------|
| | | | | | abamectin | | 0.00 ppm | <10ppb |
| | | | | | acequinocyl | | 0.00 ppm | <10ppb |
| | | | | | bifenazate | | 0.00 ppm | <10ppb |
| | | | | | bifenthrin | | 0.00 ppm | <10ppb |
| sol | vents | | | | chlormequat cl. | | 0.00 ppm | <10ppb |
| | | (| | | cyfluthrin | | 0.00 ppm | <80ppb |
| no | t tested / | not req | uirea | | 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 |
| Toxic Metals | S MT limit | 0BM63 | LOQ | | spirotetramat | | 0.00 ppm | <10ppb |
| TOXIC WICIAI | 3 IVIT IIIIIIL | ODIVIOS | LUQ | | trifloxystrobin | | 0.00 ppm | <10ppb |
| arsenic | 2 ppm | 0.0 ppm | <10pp | b | | | | |
| cadmium | 0.8 ppm | 0.0 ppm | <10pp | b | Microbial | MT limit | 0BM63 | LOQ |
| lead | 1.2 ppm | 0.0 ppm | <10pp | b | | | | |
| mercury | 0.4 ppm | 0.0 ppm | <10pp | b | E. coli | 10 CFU | 0 CFU | <10 CFU/g |
| | | | | | Salmonella sp. | 10 CFU | 0 CFU | <10 CFU/g |
| Comments | | | | | 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 |
| | | | | | | | | |

All testing was completed onsite at 6073 US93N, Olney MT · Potency (cannabinoid concentration) is calcuated from the equation: [cannabioid] = 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_0^2 = $\sum (\partial f/\partial i)^2 s_i^2$ 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

Printed 3/4/2020 3:40 PM



Order #: 37180 Order Name: BSO2.092519.A Batch#: BSO2.092519.A Received: 09/27/2019 Completed: 10/01/2019



Sample

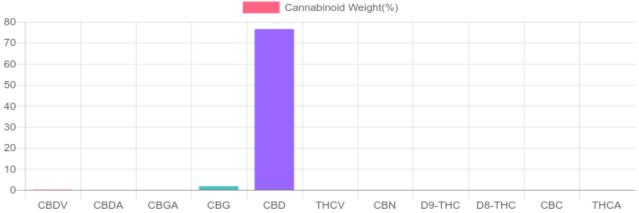


N/D D9-THC **76.48%**Total CBD

Cannabinoids Test

SHIMADZU INTEGRATED UPLC-PDA

| GSL SOP 400 | SSL SOP 400 PREPARED: 09/27/2019 22:34:39 | |): 09/30/2019 12:49:03 |
|--------------------|--|-----------|-------------------------------|
| Cannabinoids | LOQ | weight(%) | mg/g |
| D9-THC | 10 PPM | N/D | N/D |
| THCA | 10 PPM | N/D | N/D |
| CBD | 10 PPM | 76.48% | 764.84 |
| CBDA | 20 PPM | N/D | N/D |
| CBDV | 20 PPM | 0.11% | 1.10 |
| CBC | 10 PPM | N/D | N/D |
| CBN | 10 PPM | N/D | N/D |
| CBG | 10 PPM | 1.79% | 17.90 |
| CBGA | 20 PPM | N/D | N/D |
| D8-THC | 10 PPM | N/D | N/D |
| THCV | 10 PPM | N/D | N/D |
| TOTAL D9-THC | | N/D | N/D |
| TOTAL CBD* | | 76.48% | 764.84 |
| TOTAL CANNABINOIDS | | 78.38% | 783.84 |



Reporting Limit 100 ppm

*Total CBD = CBD + CBDA x 0.877

N/D - Not Detected, B/LOQ - Below Limit of Quantification



4001 SW 47th Avenue Suite 208 Davie, FL 33314 1-833-TEST-CBD info@greenscientificlabs.com











Order #: 37180

Order Name: BSO2.092519.A Batch#: BSO2.092519.A Received: 09/27/2019 Completed: 10/01/2019



TERPENES: TOTAL (0.027%)

Headspace GCMS - Shimadzu GCMS QP2020 with HS20

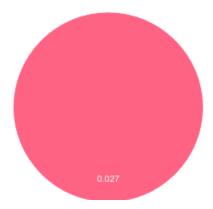
 Terpene
 Results (%)
 LOQ (%)
 LOD (%)

 GERANIOL
 0.027%
 0.0067%
 0.0063%

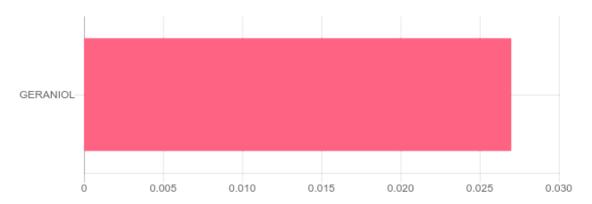
GSL SOP 404

Prepared: 09/27/2019 22:57:12 Uploaded: 09/30/2019 17:51:50

Terpenes Breakdown



Top Terpenes Results:



Tested for but not present:

ALPHA-PINENE, CAMPHENE, BETA-MYRCENE, BETA-PINENE, 3-CARENE, ALPHA-TERPINENE, TRANS-BETA-OCIMENE, LIMONENE, P-CYMENE, CIS-BETA-OCIMENE, EUCALYPTOL, GAMMA-TERPINENE, TERPINOLENE, LINALOOL, ISOPULEGOL, CARYOPHYLLENE, HUMULENE, CIS-NEROLIDOL, TRANS-NEROLIDOL, GUAIOL, CARYOPHYLLENE OXIDE, ALPHA-BISABOLOL



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Order #: 37180 Order Name: BSO2.092519.A Batch#: BSO2.092519.A Received: 09/27/2019 Completed: 10/01/2019



PESTICIDE ANALYSIS:

GSL SOP 401 PREPARED: 09/27/2019 22:39:46 UPLOADED: 09/30/2019 20:39:11

LCMS-MS - Shimadzu LCMS-8060

| Pesticide | Action Level (ppm) | Results (ppm) | LOQ (ppm) | LOD (ppm) | Pesticide | Action Level (ppm) | Results (ppm) | LOQ (ppm) | LOD (ppm) |
|---------------------|--------------------|---------------|--------------|--------------|-----------------|--------------------|---------------|--------------|--------------|
| ABAMECTIN B1A | 0.100 | N/D | 0.005 | 0.001 | IMAZALIL | 0.100 | N/D | 0.005 | 0.001 |
| ACEPHATE | 0.100 | N/D | 0.001 | 0.001 | IMIDACLOPRID | 5.000 | N/D | 0.005 | 0.001 |
| ACEQUINOCYL | 0.100 | N/D | 0.001 | 0.001 | KRESOXIM-METHYL | 0.100 | N/D | 0.010 | 0.005 |
| ACETAMIPRID | 0.100 | N/D | 0.005 | 0.001 | MALATHION | 0.500 | N/D | 0.005 | 0.001 |
| ALDICARB | 0.100 | N/D | 0.005 | 0.001 | METALAXYL | 2.000 | N/D | 0.001 | 0.001 |
| AZOXYSTROBIN | 0.100 | N/D | 0.001 | 0.001 | METHIOCARB | 0.100 | N/D | 0.005 | 0.001 |
| BIFENAZATE | 0.100 | N/D | 0.005 | 0.001 | METHOMYL | 1.000 | N/D | 0.001 | 0.001 |
| BIFENTHRIN | 3.000 | N/D | 0.005 | 0.001 | MEVINPHOS | 0.100 | N/D | 0.001 | 0.001 |
| BOSCALID | 0.100 | N/D | 0.005 | 0.001 | MYCLOBUTANIL | 0.100 | N/D | 0.005 | 0.001 |
| CARBARYL | 0.500 | N/D | 0.003 | 0.001 | NALED | 0.100 | N/D | 0.005 | 0.001 |
| CARBOFURAN | 0.100 | N/D | 0.001 | 0.001 | OXAMYL | 0.500 | N/D | 0.001 | 0.001 |
| CHLORANTRANILIPROLE | 10.000 | N/D | 0.005 | 0.005 | PACLOBUTRAZOL | 0.100 | N/D | 0.005 | 0.001 |
| CHLORPYRIFOS | 0.100 | N/D | 0.001 | 0.001 | PERMETHRINS | 0.500 | N/D | 0.005 | 0.001 |
| CLOFENTEZINE | 0.100 | N/D | 0.001 | 0.001 | PHOSMET | 0.100 | N/D | 0.005 | 0.001 |
| DAMINOZIDE | 0.100 | N/D | 0.005 | 0.001 | PIPERONYL | 3.000 | N/D | 0.001 | 0.001 |
| DIAZANON | 0.100 | N/D | 0.001 | 0.001 | BUTOXIDE | 3.000 | IN/D | 0.001 | 0.001 |
| DICHLORVOS | 0.100 | N/D | 0.005 | 0.001 | PRALLETHRIN | 0.100 | N/D | 0.005 | 0.005 |
| DIMETHOATE | 0.100 | N/D | 0.001 | 0.001 | PROPICONAZOLE | 0.100 | N/D | 0.010 | 0.005 |
| DIMETHOMORPH | 2.000 | N/D | 0.005 | 0.001 | PROPOXUR | 0.100 | N/D | 0.001 | 0.001 |
| ETHOPROPHOS | 0.100 | N/D | 0.001 | 0.001 | PYRETHRINS | 0.500 | N/D | 0.005 | 0.005 |
| ETOFENPROX | 0.100 | N/D | 0.001 | 0.001 | (PYRETHRIN I) | | | | |
| ETOXAZOLE | 0.100 | N/D | 0.010 | 0.005 | PYRIDABEN | 0.100 | N/D | 0.005 | 0.001 |
| FENHEXAMID | 0.100 | N/D | 0.005 | 0.001 | SPINETORAM | 0.100 | N/D | 0.001 | 0.001 |
| FENOXYCARB | 0.100 | N/D | 0.005 | 0.001 | SPINOSAD | 0.100 | N/D | 0.001 | 0.001 |
| FENPYROXIMATE | 0.100 | N/D | 0.001 | 0.001 | SPIROMESIFEN | 0.100 | N/D | 0.005 | 0.001 |
| FIPRONIL | 0.100 | N/D | 0.003 | 0.001 | SPIROTETRAMAT | 0.100 | N/D | 0.001 | 0.001 |
| FLONICAMID | 0.100 | N/D | 0.025 | 0.010 | SPIROXAMINE | 0.100 | N/D | 0.001 | 0.001 |
| FLUDIOXONIL | 0.100 | N/D | 0.003 | 0.001 | TEBUCONAZOLE | 0.100 | N/D | 0.005 | 0.001 |
| HEXYTHIAZOX | 0.100 | N/D | 0.005 | 0.001 | THIACLOPRID | 0.100 | N/D | 0.001 | 0.001 |
| | | | | | THIAMETHOXAM | 5.000 | N/D | 0.001 | 0.001 |
| | | | | | TRIFLOXYSTROBIN | 0.100 | N/D | 0.001 | 0.001 |

N/D = Not Detected, A/LOQ = Above LOQ Level, B/LOQ = Below LOQ Level, B/LOD = Below LOD Level



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Order #: 37180 Order Name: BSO2.092519.A Batch#: BSO2.092519.A Received: 09/27/2019 Completed: 10/01/2019



RESIDUAL SOLVENTS:

Headspace GCMS - Shimadzu GCMS QP2020 with HS20

GSL SOP 405

Prepared: 09/27/2019 22:31:38 Uploaded: 09/30/2019 18:55:54

| Residual Solvent | Action Level (ppm) | Results (ppm) | LOQ (ppm) | LOD (ppm) |
|------------------|--------------------|---------------|-----------|-----------|
| ACETONE | 5,000 | N/D | 140 | 20 |
| ACETONITRILE | 410 | N/D | 25 | 1 |
| BENZENE | 1 | N/D | 1 | 0.5 |
| UTANE | 5,000 | N/D | 50 | 10 |
| CHLOROFORM | 1 | N/D | 1 | 0.5 |
| ICHLOROETHANE | 1 | N/D | 1 | 0.5 |
| DICHLOROMETHANE | 1 | N/D | 1 | 0.5 |
| THANOL | 5,000 | N/D | 140 | 20 |
| THYL ACETATE | 5,000 | N/D | 140 | 20 |
| THYL ETHER | 5,000 | N/D | 140 | 20 |
| SOPROPYL ALCOHOL | 5,000 | N/D | 140 | 20 |
| METHANOL | 3,000 | N/D | 100 | 20 |
| I-HEPTANE | 5,000 | N/D | 140 | 20 |
| I-HEXANE | 290 | N/D | 18 | 10 |
| ENTANE | 5,000 | B/LOQ | 140 | 20 |
| PROPANE | 5,000 | N/D | 20 | 1 |
| OLUENE | 890 | N/D | 53 | 1 |
| RICHLOROETHENE | 1 | N/D | 0 | 0 |
| YLENES | 2,170 | N/D | 130 | 20 |















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Heavy Metals Analysis:

ICP-MS - Shimadzu ICPMS-2030

GSL SOP 403

Uploaded: 09/30/2019 21:50:39

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

Lower Limit of Quantitation (LOQ) is 75 ppb











