

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Tincture - Natural
PRODUCT STRENGTH: 450 mg
LOT NUMBER: 191213B
BEST BY DATE: 06/21
HEMP EXTRACT LOT NUMBER: 111919

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 |
|---------------------------------------|---------|---|-----------------|-----------|
| Potency - Total CBD | SOP-111 | 427.5-562.2 mg CBD LOQ*: 10 PPM† (0.001%) | <u>479.9 mg</u> | PASS |
| Potency - D9-THC | SOP-111 | None Detected LOQ: 10 PPM (0.001%) | <u>ND</u> | PASS |
| FL Compliant Pesticide Panel | SOP-111 | Florida State Hemp Program Rule 5B-57.014: Action Limits for Pesticides | <u>ND</u> | PASS |
| Microbial - Stec E.Coli | SOP-111 | Complies with USP 61/62 | <u><LOD</u> | PASS |
| Microbial - Salmonella | SOP-111 | Complies with USP 61/62 | <u><LOD</u> | PASS |
| Microbial - Aspergillus | SOP-111 | Complies with USP 61/62 | <u><LOD</u> | 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 | <u><LOD</u> | PASS |

* Level of Quantitation, † Parts Per Million

Quality Certified by: Darcie Moran 1/17/2020
 Darcie Moran Date
 Director of Quality Assurance

CERTIFICATE OF ANALYSIS

ISO/IEC 17025:2017 ACCREDITATION #103104



Order #: 44697
 Order Name: CTNAT450-191213B
 Batch#: 4
 Received: 12/20/2019
 Completed: 01/24/2020



Sample



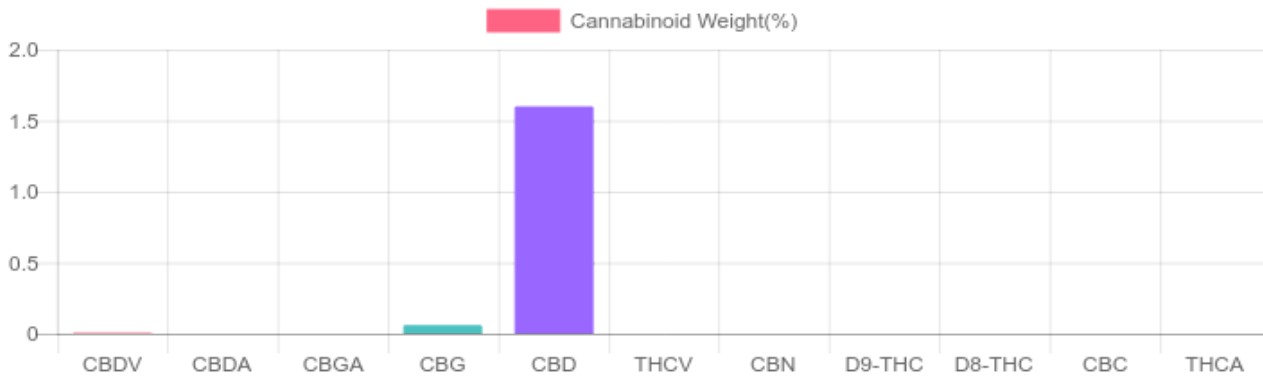
| | |
|--|-----------------------------------|
| N/D D9-THC | 1.600% Total CBD |
| 499.1 mg Cannabinoids per bottle | 479.9 mg CBD per bottle |

Cannabinoids Test

SHIMADZU INTEGRATED UPLC-PDA
 GSL SOP 400 **PREPARED:** 12/23/2019 11:57:57 **UPLOADED:** 12/23/2019 18:05:46

| 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 | 1.600% | 15.995 | 479.9 |
| CBDA | 20 PPM | N/D | N/D | N/D |
| CBDV | 20 PPM | 0.005% | 0.052 | 1.6 |
| CBC | 10 PPM | N/D | N/D | N/D |
| CBN | 10 PPM | N/D | N/D | N/D |
| CBG | 10 PPM | 0.059% | 0.588 | 17.6 |
| 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* | | 1.600% | 15.995 | 479.9 |
| TOTAL CANNABINOIDS | | 1.664% | 16.635 | 499.1 |

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



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



Green Scientific Labs uses its best efforts to deliver high quality results and to verify that the data contained therein are based on sound scientific judgment and levels listed are guidelines only and all data was reported based on standard laboratory procedures and deviations. However Green Scientific Labs makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of the data contained herein in any way. Further, Green Scientific Labs makes no claims regarding representations of the analyzed sample to the larger batch from which it was taken. Data and information in this report are intended solely for the individual(s) for whom samples were submitted and as part of our strict confidentiality policy, Green Scientific Labs can only discuss results with the original client of record.

CERTIFICATE OF ANALYSIS

ISO/IEC 17025:2017 ACCREDITATION #103104



Order #: 44697
 Order Name: CTNAT450-191213B
 Batch#: 4
 Received: 12/20/2019
 Completed: 01/24/2020



PESTICIDE ANALYSIS:

GSL SOP 401

PREPARED: 12/23/2019 15:47:09

UPLOADED: 12/26/2019 11:47:55

GCMS-MS - Shimadzu GCMS-TQ8040

| Pesticide | Action Level (ppm) | Results (ppm) | LOQ (ppm) | LOD (ppm) |
|--------------|--------------------|---------------|-----------|-----------|
| CHLORFENAPYR | 0.010 | N/D | 0.003 | 0.001 |
| COUMAPHOS | 0.010 | N/D | 0.003 | 0.001 |
| CYFLUTHRIN | 0.010 | N/D | 0.003 | 0.001 |
| CYPERMETHRIN | 0.500 | N/D | 0.003 | 0.001 |


| Pesticide | Action Level (ppm) | Results (ppm) | LOQ (ppm) | LOD (ppm) |
|-------------------------|--------------------|---------------|-----------|-----------|
| FIPRONIL | 0.010 | N/D | 0.003 | 0.001 |
| FLUDIOXONIL | 0.020 | N/D | 0.003 | 0.001 |
| PENTACHLORONITROBENZENE | 0.030 | N/D | 0.003 | 0.001 |


LCMS-MS - Shimadzu LCMS-8060

| Pesticide | Action Level (ppm) | Results (ppm) | LOQ (ppm) | LOD (ppm) |
|-----------------|--------------------|---------------|-----------|-----------|
| ABAMECTIN B1A | 0.020 | N/D | 0.005 | 0.001 |
| ACEPHATE | 0.020 | N/D | 0.001 | 0.001 |
| ACEQUINOCYL | 0.020 | N/D | 0.001 | 0.001 |
| ACETAMIPRID | 10.000 | N/D | 0.005 | 0.001 |
| ALDICARB | 0.010 | N/D | 0.005 | 0.001 |
| AZOXYSTROBIN | 0.100 | N/D | 0.001 | 0.001 |
| BIFENAZATE | 0.010 | N/D | 0.005 | 0.001 |
| CHLORPYRIFOS | 0.020 | N/D | 0.001 | 0.001 |
| CLOFENTEZINE | 0.040 | N/D | 0.001 | 0.001 |
| DAMINOZIDE | 0.010 | N/D | 0.005 | 0.001 |
| DIAZANON | 0.010 | N/D | 0.001 | 0.001 |
| DICHLORVOS | 0.020 | N/D | 0.005 | 0.001 |
| DIMETHOATE | 0.010 | N/D | 0.001 | 0.001 |
| DIMETHOMORPH | 0.010 | N/D | 0.005 | 0.001 |
| ETHOPROPHOS | 0.010 | N/D | 0.001 | 0.001 |
| ETOFENPROX | 0.010 | N/D | 0.001 | 0.001 |
| ETOXAZOLE | 0.010 | N/D | 0.010 | 0.005 |
| FENHEXAMID | 0.080 | N/D | 0.005 | 0.001 |
| FENOXYCARB | 0.010 | N/D | 0.005 | 0.001 |
| FENPYROXIMATE | 0.100 | N/D | 0.001 | 0.001 |
| FLONICAMID | 0.100 | N/D | 0.025 | 0.010 |
| HEXYTHIAZOX | 0.100 | N/D | 0.005 | 0.001 |
| IMAZALIL | 0.010 | N/D | 0.005 | 0.001 |
| IMIDACLOPRID | 0.020 | N/D | 0.005 | 0.001 |
| KRESOXIM-METHYL | 0.020 | N/D | 0.010 | 0.005 |
| MALATHION | 0.010 | N/D | 0.005 | 0.001 |

| Pesticide | Action Level (ppm) | Results (ppm) | LOQ (ppm) | LOD (ppm) |
|--------------------------|--------------------|---------------|-----------|-----------|
| METALAXYL | 0.010 | N/D | 0.001 | 0.001 |
| METHIOCARB | 0.010 | N/D | 0.005 | 0.001 |
| METHOMYL | 0.010 | N/D | 0.001 | 0.001 |
| MEVINPHOS | 0.010 | N/D | 0.001 | 0.001 |
| MYCLOBUTANIL | 0.020 | N/D | 0.005 | 0.001 |
| NALED | 0.010 | N/D | 0.005 | 0.001 |
| OXAMYL | 0.026 | N/D | 0.001 | 0.001 |
| PACLOBUTRAZOL | 0.010 | N/D | 0.005 | 0.001 |
| PERMETHRINS | 0.020 | N/D | 0.005 | 0.001 |
| PHOSMET | 0.020 | N/D | 0.005 | 0.001 |
| PIPERONYL BUTOXIDE | 3.000 | N/D | 0.001 | 0.001 |
| PRALLETHRIN | 0.020 | N/D | 0.005 | 0.005 |
| PROPICONAZOLE | 0.020 | N/D | 0.010 | 0.005 |
| PROPOXUR | 0.020 | N/D | 0.001 | 0.001 |
| PYRETHRINS (PYRETHRIN I) | 0.500 | N/D | 0.005 | 0.005 |
| PYRIDABEN | 0.020 | N/D | 0.005 | 0.001 |
| SPINETORAM | 0.040 | N/D | 0.001 | 0.001 |
| SPINOSAD (SPINOSYN A) | 0.020 | N/D | 0.001 | 0.001 |
| SPINOSAD (SPINOSYN D) | 0.020 | N/D | 0.001 | 0.001 |
| SPIROMESIFEN | 0.030 | N/D | 0.005 | 0.001 |
| SPIROTETRAMAT | 0.020 | N/D | 0.001 | 0.001 |
| SPIROXAMINE | 0.010 | N/D | 0.001 | 0.001 |
| TEBUCONAZOLE | 0.010 | N/D | 0.005 | 0.001 |
| THIACLOPRID | 0.010 | N/D | 0.001 | 0.001 |
| THIAMETHOXAM | 0.010 | N/D | 0.001 | 0.001 |
| TRIFLOXYSTROBIN | 0.020 | 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


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


 Ben Witten, MS, MT., Lab Director

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



Green Scientific Labs uses its best efforts to deliver high quality results and to verify that the data contained therein are based on sound scientific judgment and levels listed are guidelines only and all data was reported based on standard laboratory procedures and deviations. However Green Scientific Labs makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of the data contained herein in any way. Further, Green Scientific Labs makes no claims regarding representations of the analyzed sample to the larger batch from which it was taken. Data and information in this report are intended solely for the individual(s) for whom samples were submitted and as part of our strict confidentiality policy, Green Scientific Labs can only discuss results with the original client of record.

CERTIFICATE OF ANALYSIS

ISO/IEC 17025:2017 ACCREDITATION #103104



Order #: 44697
 Order Name: CTNAT450-191213B
 Batch#: 4
 Received: 12/20/2019
 Completed: 01/24/2020



Microbial Analysis:

Microbial Analysis GSL SOP 406

Uploaded: 12/26/2019 13:07:18

PCR - Agilent AriaMX

| Test | Test Method Used | Device Used | LOD | Allowable Criteria | Actual Result | Pass/Fail |
|--------------|------------------|-------------|-----------------|--------------------|---------------|-----------|
| STEC E.COLI* | USP 61/62† | ARIAMX PCR | 2 COPIES OF DNA | PRESENCE / ABSENT | BELOW LOD | PASS |
| SALMONELLA* | USP 61/62† | ARIAMX PCR | 5 COPIES OF DNA | PRESENCE / ABSENT | BELOW LOD | PASS |
| ASPERGILLUS | USP 61/62† | ARIAMX PCR | ASP_LOD*** | PRESENCE / ABSENT | BELOW LOD | PASS |

† USP 61 (enumeration of bacteria TAC, TYM, and ENT/Coliform), USP 62 (identifying specific species E.coli Aspergillus etc)

* STEC and Salmonella run as Multiplex

*** Flavus = 2 Copies of DNA / Fumigatis = 2 Copies of DNA Niger = 20 Copies of DNA / Terrus = 10 copies of DNA

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

Ben Witten, MS, MT., Lab Director

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



Green Scientific Labs uses its best efforts to deliver high quality results and to verify that the data contained therein are based on sound scientific judgment and levels listed are guidelines only and all data was reported based on standard laboratory procedures and deviations. However Green Scientific Labs makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of the data contained herein in any way. Further, Green Scientific Labs makes no claims regarding representations of the analyzed sample to the larger batch from which it was taken. Data and information in this report are intended solely for the individual(s) for whom samples were submitted and as part of our strict confidentiality policy, Green Scientific Labs can only discuss results with the original client of record.

CERTIFICATE OF ANALYSIS

ISO/IEC 17025:2017 ACCREDITATION #103104



Order #: 44697
Order Name: CTNAT450-191213B
Batch#: 4
Received: 12/20/2019
Completed: 01/24/2020



Heavy Metals Analysis:

ICP-MS - Shimadzu ICPMS-2030
GSL SOP 403

Uploaded: 12/23/2019 20:16:47

| 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

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

Ben Witten, MS, MT., Lab Director

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



Green Scientific Labs uses its best efforts to deliver high quality results and to verify that the data contained therein are based on sound scientific judgment and levels listed are guidelines only and all data was reported based on standard laboratory procedures and deviations. However Green Scientific Labs makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of the data contained herein in any way. Further, Green Scientific Labs makes no claims regarding representations of the analyzed sample to the larger batch from which it was taken. Data and information in this report are intended solely for the individual(s) for whom samples were submitted and as part of our strict confidentiality policy, Green Scientific Labs can only discuss results with the original client of record.



total cannabinoids 88.5% CBD decarb total 84.61% Δ9-THC ND

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



Stillwater Laboratories

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

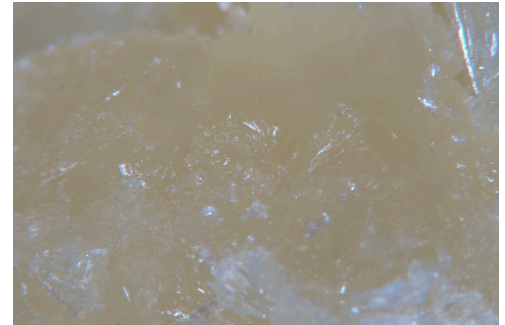
Sample Handling

test ID 6070 sample date 12/4/19 2:46 PM order 6070 labID 9MD44 weight 5.4 g source

Methods

Table with columns: method, equipment. Lists various testing methods like weights, potency, terpenes, pesticides, etc.

concentrate



Potency

Table of cannabinoid and terpene potency results with columns for compound name, percentage, and estimated error.

Terpenes

Table of terpene results for both HERBAL and FLORAL samples, including beta-myrcene, alpha-pinene, etc.

Solvents

Table of solvent testing results with columns for solvent name, MT limit, 9MD44 result, and LOQ.

Pesticides (MT)

Table of pesticide testing results for MT samples with columns for pesticide name, MT limit, 9MD44 result, and LOQ.

Pesticides (other)

Table of pesticide testing results for other samples with columns for pesticide name, 9MD44 result, and LOQ.

Toxic Metals

Table of toxic metal testing results with columns for metal name, MT limit, 9MD44 result, and LOQ.

Microbial

Table of microbial testing results with columns for microorganism name, MT limit, 9MD44 result, and LOQ.

• All testing was completed onsite at 6073 US93N, Olney MT ... Potency (cannabinoid concentration) is calculated from the equation: [cannabinoid] = [cannabinoid]_{HPLC} \times volume_{dilution} / m_{dry}.

Certified by:

Handwritten signature of Kyle Larson

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