JOY ORGANICS

# CERTIFICATE OF ANALYSIS

| | |
|---|---|
| **PRODUCT NAME:** | Certified Organic CBD FS Tincture - Tropical |
| **PRODUCT STRENGTH:** | 1350 mg |
| **FILL LOT:** | B1211-003 |
| **TINCTURE BATCH:** | 21180A |
| **BEST BY DATE:** | 12/29/2022 |
| **HEMP EXTRACT LOT** | NA |

*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 - Coconut and hemp, tropical. | 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 | 1350-1687.5 mg CBD<br>LOQ**: 10 PPM† (0.001%) | **1368.1 mg** | PASS |
| **Potency** - D9-THC | SOP-111 | LOQ: 10 PPM<br>(0.001%-0.3%) | **.16%** | 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 — Kayla Kolber — 07/06/2021

Kayla Kolber
Quality Assurance Technician

Date



119 W. Oak St. Fort Collins, CO 80524
Tel: (833) 569-7223 www.joyorganics.com

# B1211-003

# 7USC1639 Certificate of Analysis

sample ID 25407

certificate ID
**0MN50**

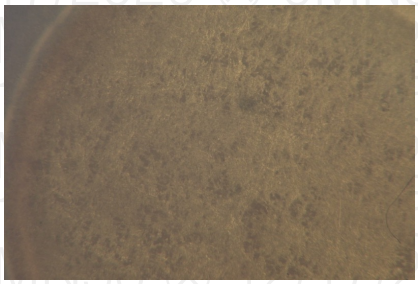
total cannabinoids **1502.7mg** per 30mL

THC‡ 45.0mg CBD‡ 1368.1m

Stillwater Laboratories

order 9236
analysis date 12/15/2020 4:57:23 PM
test tag 9236.3.4
sample wgt 1.0 g

**7USC1639 Infused**



## Inspection MSP-7.5.1.2

DESCRIPTION: Tincture sample (1.00g) received in a client-labeled bottle, by commercial courier. Labeled 25407 and sample tag 9236.3.4.

## Potency per 30mL

| | MSP-7.5.1.4 | LOD | LOQ | error (95%CI k=2) |
|---|---|---|---|---|
| tetrahydrocannabolic acid (THCa) | ND | 0.06 | 0.19 | ±0.19mg |
| Δ9-tetrahydrocannabinol (Δ9 THC) | 45.0mg | 0.06 | 0.17 | ±0.94mg |
| Δ8-tetrahydrocannabinol (Δ8 THC) | ND | 0.08 | 0.23 | ±0.23mg |
| tetrahydrocannabivarin (THCv) | ND | 0.06 | 0.19 | ±0.19mg |
| cannabidiolic acid (CBDa) | ND | 0.05 | 0.16 | ±0.16mg |
| cannabidiol (CBD) | 1368.1mg | 0.06 | 0.18 | ±23.57mg |
| cannabidivarin (CBDv) | ND | 0.06 | 0.18 | ±0.18mg |
| cannabigerolic acid (CBGa) | ND | 0.05 | 0.16 | ±0.16mg |
| cannabigerol (CBG) | 80.9mg | 0.07 | 0.20 | ±1.58mg |
| cannabinol (CBN) | 4.8mg | 0.03 | 0.10 | ±0.18mg |
| cannabichromene (CBC) | 4.0mg | 0.06 | 0.18 | ±0.25mg |

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

## Microbial MSP-7.5.1.10

| | | limit |
|---|---|---|
| Ochratoxin A | PASS | 20 ppb |
| Aflatoxin | PASS | 20 ppb |

## Metals MSP-7.5.1.11

| | | limit |
|---|---|---|
| Arsenic | PASS | 1500 ppb |
| Cadmium | PASS | 500 ppb |
| Lead | PASS | 500 ppb |
| Mercury | PASS | 300 ppb |

## Solvents MSP-7.5.1.7

| | | limit |
|---|---|---|
| Acetone | PASS | 5000 ppm |
| Acetonitrile | PASS | 410 ppm |
| Benzene | PASS | 0 ppm |
| Butane | PASS | 5000 ppm |
| Chloroform | PASS | 0 ppm |
| Cyclohexane | PASS | 0 ppm |
| Ethanol | PASS | 10000 ppm |
| Heptane | PASS | 5000 ppm |
| Hexane | PASS | 290 ppm |
| Isopropyl alcohol | PASS | 5000 ppm |
| Methanol | PASS | 3000 ppm |
| Pentane | PASS | 5000 ppm |
| Propane | PASS | 5000 ppm |
| Toluene | PASS | 890 ppm |
| Xylenes | PASS | 2170 ppm |

## Pesticides MSP-7.5.1.8

| | | limit |
|---|---|---|
| Abamectin | PASS | 0.3 ppm |
| Acephate | PASS | 5.0 ppm |
| Acequinocyl | PASS | 4.0 ppm |
| Acetamiprid | PASS | 5.0 ppm |
| Aldicarb | PASS | 0.4 ppm |
| Azoxystrobin | PASS | 40.0 ppm |
| Bifenazate | PASS | 5.0 ppm |
| Bifenthrin | PASS | 0.5 ppm |
| Boscalid | PASS | 10.0 ppm |
| Carbaryl | PASS | 0.5 ppm |
| Carbofuran | PASS | 0.0 ppm |
| Chloantraniliprole | PASS | 40.0 ppm |
| Chlorfenapyr | PASS | 0.0 ppm |
| Chlorpyrifos | PASS | 0.0 ppm |
| Clofentezine | PASS | 0.5 ppm |
| Coumaphos | PASS | 0.5 ppm |
| Cyfluthrin | PASS | 1.0 ppm |
| Cypermethrin | PASS | 1.0 ppm |

## Pesticides MSP-7.5.1.8

| | | limit |
|---|---|---|
| Daminozide | PASS | 0.0 ppm |
| Dichlorvos | PASS | 0.0 ppm |
| Diazinon | PASS | 0.2 ppm |
| Dimethoate | PASS | 0.0 ppm |
| Etoxazole | PASS | 1.5 ppm |
| Fenoxycarb | PASS | 0.0 ppm |
| Fenpyroximate | PASS | 2.0 ppm |
| Fipronil | PASS | 0.0 ppm |
| Flonicamid | PASS | 2.0 ppm |
| Fludioxonil | PASS | 30.0 ppm |
| Hexythiazox | PASS | 2.0 ppm |
| Imazalil | PASS | 0.0 ppm |
| Imidacloprid | PASS | 3.0 ppm |
| Malathion | PASS | 5.0 ppm |
| Metalaxyl | PASS | 15.0 ppm |
| Methiocarb | PASS | 0.0 ppm |
| Methomyl | PASS | 0.1 ppm |
| Methyl parathion | PASS | 0.0 ppm |
| Mevinphos | PASS | 0.0 ppm |
| Myclobutanil | PASS | 9.0 ppm |
| Naled | PASS | 0.5 ppm |
| Oxamyl | PASS | 0.2 ppm |
| Paclobutrazol | PASS | 0.0 ppm |
| Permethrin | PASS | 20.0 ppm |
| Phosmet | PASS | 0.2 ppm |

## Pesticides MSP-7.5.1.8

| | | limit |
|---|---|---|
| Piperonylbutoxide | PASS | 8.0 ppm |
| Prallethrin | PASS | 0.4 ppm |
| Propiconazole | PASS | 20.0 ppm |
| Propoxur | PASS | 0.0 ppm |
| Pyrethrin | PASS | 1.0 ppm |
| Pyridaben | PASS | 3.0 ppm |
| Spinetoram | PASS | 3.0 ppm |
| Spinosad | PASS | 3.0 ppm |
| Spiromesifen | PASS | 12.0 ppm |
| Spirotetramat | PASS | 13.0 ppm |
| Spiroxamine | PASS | 0.0 ppm |
| Tebuconazole | PASS | 2.0 ppm |
| Thiacloprid | PASS | 0.1 ppm |
| Thiamethoxam | PASS | 4.5 ppm |
| Trifloxystrobin | PASS | 30.0 ppm |

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:

Kyle Larson, MSc (Biology)
Deputy Director

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

Printed
12/17/2020 3:27 PM

The data in this report is the property of and is administered by Stillwater Labs. The format, layout, and security features of this report are copyrighted by Stillwater Laboratories Inc. © 2020

HEMP INDUSTRIES ASSOCIATION Member

ASA PFC Laboratory

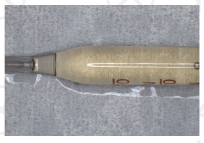
ISO/IEC 17025:2017
ACCREDITED
Certificate #4961.01
https://portal.a2la.org/scopepdf/4961-01.pdf

certificate ID
**1GA40**

# OFTT1350

21180A

rec'd 7/1/2021 2:32:23 PM order 11189



# 7USC1639 Certificate of Analysis

Stillwater Laboratories

## Microbial

| | MSP-7.5.1.10 | limit | LOD | LOQ | error | result |
|---|---|---|---|---|---|---|
| E.coli | ND | 0CFU | 0.0 | 0.1 | ±0.1CFU | PASS |
| Salmonella sp. | ND | 0CFU | 0.0 | 0.1 | ±0.1CFU | PASS |
| molds | ND | 10000CFU | 1.7 | 5.1 | ±5.1CFU | PASS |

SECURITY FEATURE: WATERMARK MUST MATCH CERTIFICATE ID AND ISSUE DATE

Certified by:

Kyle Larson, MSc
Deputy Director

Printed 7/3/2021 12:15 PM

ASA PFC Laboratory

A2LA ACCREDITED
CERT #s 4961.01, 4961.02 & 4961.03

https://customer.a2la.org/index.cfm?event=directory.detail&labPID=423635B2-5128-4C6F-871A-419DCF43B0D7

**Stillwater Laboratories Inc.**
MT License L0001, L00007
6073 US93N Suite 5, Olney MT 59927
406-881-2019

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

• All testing was completed onsite at 6073 US93N, Olney MT •• Potency (cannabinoid concentration) is calcuated as: $[\text{cannabioid}] = [\text{cannabinoid}]_{HPLC} \times \text{volume}_{dilution}/m_{dry}$. ••• Decarboxyted cannabinoid concentration is calculated $XXX_{total} = 0.877 \times XXXa + XXX$ •••• Standards are used to calibrate the resulting data and estimate error using a standard estimate of error method; LOD is the limit of detection ($3.3s_i$), LOQ is the limit of quantification (3xLOD), and experimental error is calculated from weighing, dilution, and interpolation error using the 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: (concentration) $\pm t_{CL90} \times s_g$. Sampling error is not considered in error calculations. ND = not detected (< LOD), NT = not tested, NL = no limit, NA = not applicable. ‡ = decarbed