

PharmLabs San Diego Certificate of Analysis

3421 Hancock St, Second Floor, San Diego, CA 92110 | License: C8-0000098-LIC
 ISO/IEC 17025:2017 Certification L17-427-1 | Accreditation #85368



Sample (Ghost: Shadow Blend): Limoncello

| | | | |
|-------------------|--------------------------------------|----------|---------------------------------------|
| Sample ID | SD230404-017 (71557) | Matrix | Concentrate (Inhalable Cannabis Good) |
| Tested for | Ghost | Received | Apr 03, 2023 |
| Sampled | - | Reported | Apr 11, 2023 |
| Analyses executed | CANX, RES, MIBIG, MTO, PES, HME, FVI | | |

Laboratory note: The estimated concentration of the unknown peak in the sample is 1.73%. Currently PharmLabs laboratory can not confirm an unidentified peak in your chromatogram due to interference (only with highly concentrated D8 products) from which we believe to be either (+)-8-THC or d9-THC. At this time there are no reference standards available for (+)-8-THC and d9-THC is a different compound from the main (-)-8-THC cannabinoid and, therefore, these two compounds may have different efficacies. Using the most advanced instruments and techniques available, the separation of (+)-8-THC and d9-THC is problematic for the scientific community as a whole. PharmLabs believes the unidentified peak to be a combination of (+)-8-THC and d9-THC with the majority, if not all, of the concentration being (+)-8-THC. Total (+)-8-THC Concentration is estimated to be: 53.08%

CANX - Cannabinoids Analysis

Analyzed Apr 11, 2023 | Instrument HPLC-VWD | Method
 The expanded Uncertainty of the Cannabinoid analysis is approximately 7.806% at the 95% Confidence Level

| Analyte | LOD mg/g | LOQ mg/g | Result % | Result mg/g |
|--|----------|----------|----------|-------------|
| 11-Hydroxy-Δ8-Tetrahydrocannabinol (11-Hyd-Δ8-THCV) | 0.013 | 0.041 | ND | ND |
| Cannabidiol (CBDO) | 0.002 | 0.007 | ND | ND |
| Abnormal Cannabidiol (a-CBDO) | 0.01 | 0.031 | ND | ND |
| (+/-)-9B-Hydroxy-Hexahydrocannabinol (9b-HHC) | 0.012 | 0.036 | ND | ND |
| 11-Hydroxy-Δ8-Tetrahydrocannabinol (11-Hyd-Δ8-THC) | 0.007 | 0.021 | ND | ND |
| Cannabidiolic Acid (CBDA) | 0.001 | 0.16 | ND | ND |
| Cannabigerol Acid (CBGA) | 0.001 | 0.16 | ND | ND |
| Cannabigerol (CBG) | 0.001 | 0.16 | ND | ND |
| Cannabidiol (CBD) | 0.001 | 0.16 | ND | ND |
| 1(S)-THD (s-THD) | 0.013 | 0.041 | ND | ND |
| 1(R)-THD (r-THD) | 0.025 | 0.075 | ND | ND |
| Tetrahydrocannabinol (THCV) | 0.001 | 0.16 | ND | ND |
| Δ8-tetrahydrocannabinol (Δ8-THCV) | 0.021 | 0.064 | ND | ND |
| Cannabidihexol (CBDH) | 0.005 | 0.16 | ND | ND |
| Tetrahydrocannabinol (Δ9-THCB) | 0.013 | 0.038 | ND | ND |
| Cannabinol (CBN) | 0.001 | 0.16 | 2.05 | 20.48 |
| Cannabidiophorol (CBDP) | 0.015 | 0.047 | ND | ND |
| exo-THC (exo-THC) | 0.005 | 0.16 | ND | ND |
| Tetrahydrocannabinol (Δ9-THC) | 0.003 | 0.16 | UI | UI |
| Δ8-tetrahydrocannabinol (Δ8-THC) | 0.004 | 0.16 | 53.08 | 530.80 |
| (6aR,9S)-Δ10-Tetrahydrocannabinol ((6aR,9S)-Δ10) | 0.015 | 0.16 | 2.28 | 22.82 |
| Hexahydrocannabinol (S Isomer) (9s-HHC) | 0.017 | 0.16 | ND | ND |
| (6aR,9R)-Δ10-Tetrahydrocannabinol ((6aR,9R)-Δ10) | 0.007 | 0.16 | 26.97 | 269.72 |
| Hexahydrocannabinol (R Isomer) (9r-HHC) | 0.016 | 0.16 | ND | ND |
| Tetrahydrocannabinolic Acid (THCA) | 0.001 | 0.16 | 0.98 | 9.76 |
| Δ9-Tetrahydrocannabinol (Δ9-THCH) | 0.024 | 0.071 | ND | ND |
| Cannabinol Acetate (CBNO) | 0.014 | 0.043 | ND | ND |
| Δ9-Tetrahydrocannabinol (Δ9-THCP) | 0.017 | 0.16 | ND | ND |
| Δ8-Tetrahydrocannabinol (Δ8-THCP) | 0.041 | 0.16 | ND | ND |
| Cannabicitran (CBT) | 0.005 | 0.16 | ND | ND |
| Δ8-THC-O-acetate (Δ8-THCO) | 0.076 | 0.16 | ND | ND |
| 9(S)-HHCP (s-HHCP) | 0.031 | 0.094 | ND | ND |
| Δ9-THC-O-acetate (Δ9-THCO) | 0.066 | 0.16 | ND | ND |
| 9(R)-HHCP (r-HHCP) | 0.026 | 0.079 | ND | ND |
| 9(S)-HHC-O-acetate (s-HHCO) | 0.005 | 0.16 | ND | ND |
| 3-octyl-Δ8-Tetrahydrocannabinol (Δ8-THC-C8) | 0.067 | 0.204 | ND | ND |
| Δ9-THC methyl ether (Δ9-MeO-THC) | | | ND | ND |
| Total THC (THCa * 0.877 + Δ9THC) | | | 0.86 | 8.56 |
| Total THC + Δ8THC + Δ10THC (THCa * 0.877 + Δ9THC + Δ8THC + Δ10THC) | | | 83.19 | 831.90 |
| Total CBD (CBDA * 0.877 + CBD) | | | ND | ND |
| Total CBG (CBGa * 0.877 + CBG) | | | ND | ND |
| Total HHC (9r-HHC + 9s-HHC) | | | ND | ND |
| Total Cannabinoids | | | 85.24 | 852.38 |

HME - Heavy Metals Detection Analysis

Analyzed Apr 11, 2023 | Instrument ICP/MSMS | Method SOP-005

| Analyte | LOD ug/g | LOQ ug/g | Result ug/g | Limit ug/g | Analyte | LOD ug/g | LOQ ug/g | Result ug/g | Limit ug/g |
|--------------|----------|----------|-------------|------------|--------------|----------|----------|-------------|------------|
| Arsenic (As) | 0.0002 | 0.0005 | 0.00 | 0.2 | Cadmium (Cd) | 3.0e-05 | 0.0005 | ND | 0.2 |
| Mercury (Hg) | 1.0e-05 | 0.0001 | ND | 0.1 | Lead (Pb) | 1.0e-05 | 0.00125 | 0.04 | 0.5 |

UI Not Identified
 ND Not Detected
 N/A Not Applicable
 NT Not Reported
 LOD Limit of Detection
 LOQ Limit of Quantification
 <LOQ Detected
 >ULOL Above upper limit of linearity
 CFU/g Colony Forming Units per 1 gram
 TNTC Too Numerous to Count



Scan the QR code to verify authenticity.

Authorized Signature

Brandon Starr

Brandon Starr, Lab Manager
 Tue, 11 Apr 2023 14:10:35 -0700

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MIBIG - Microbial Testing Analysis

Analyzed Apr 06, 2023 | Instrument qPCR and/or Plating | Method SOP-007

| Analyte | Result CFU/g | Limit | Analyte | Result CFU/g | Limit |
|--|--------------|---------------|---------------------|--------------|---------------|
| Shiga toxin-producing Escherichia Coli | ND | ND per 1 gram | Salmonella spp. | ND | ND per 1 gram |
| Aspergillus fumigatus | ND | ND per 1 gram | Aspergillus flavus | ND | ND per 1 gram |
| Aspergillus niger | ND | ND per 1 gram | Aspergillus terreus | ND | ND per 1 gram |

MTO - Mycotoxin Testing Analysis

Analyzed Apr 07, 2023 | Instrument LC/MSMS | Method SOP-004

| Analyte | LOD ug/kg | LOG ug/kg | Result ug/kg (ppb) | Limit ug/kg | Analyte | LOD ug/kg | LOG ug/kg | Result ug/kg (ppb) | Limit ug/kg |
|--------------|-----------|-----------|--------------------|-------------|------------------|-----------|-----------|--------------------|-------------|
| Ochratoxin A | 5.0 | 20.0 | ND | 20 | Aflatoxin B1 | 2.5 | 5.0 | ND | - |
| Aflatoxin B2 | 2.5 | 5.0 | ND | - | Aflatoxin G1 | 2.5 | 5.0 | ND | - |
| Aflatoxin G2 | 2.5 | 5.0 | ND | - | Total Aflatoxins | 10.0 | 20.0 | ND | 20 |

UI Not Identified
 ND Not Detected
 N/A Not Applicable
 NT Not Reported
 LOD Limit of Detection
 LOQ Limit of Quantification
 <LOQ Detected
 >ULOL Above upper limit of linearity
 CFU/g Colony Forming Units per 1 gram
 TNTC Too Numerous to Count



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Brandon Starr, Lab Manager
 Tue, 11 Apr 2023 14:10:35 -0700

PES - Pesticides Screening Analysis

Analyzed Apr 07, 2023 | Instrument LC/MSMS GC/MSMS | Method SOP-003

| Analyte | LOD ug/g | LOQ ug/g | Result ug/g | Limit ug/g | Analyte | LOD ug/g | LOQ ug/g | Result ug/g | Limit ug/g |
|-------------------------|----------|----------|-------------|------------|-----------------------|----------|----------|-------------|------------|
| Aldicarb | 0.0078 | 0.02 | ND | 0.0078 | Carbofuran | 0.01 | 0.02 | ND | 0.01 |
| Dimethoate | 0.01 | 0.02 | ND | 0.01 | Etofenprox | 0.02 | 0.1 | ND | 0.02 |
| Fenoxycarb | 0.01 | 0.02 | ND | 0.01 | Thiachloprid | 0.01 | 0.02 | ND | 0.01 |
| Daminozide | 0.01 | 0.03 | ND | 0.01 | Dichlorvos | 0.02 | 0.07 | ND | 0.02 |
| Imazail | 0.02 | 0.07 | ND | 0.02 | Methiocarb | 0.01 | 0.02 | ND | 0.01 |
| Spiroxamine | 0.01 | 0.02 | ND | 0.01 | Coumaphos | 0.01 | 0.02 | ND | 0.01 |
| Fipronil | 0.01 | 0.1 | ND | 0.01 | Paclbutrazol | 0.01 | 0.03 | ND | 0.01 |
| Chlorpyrifos | 0.01 | 0.04 | ND | 0.01 | Ethoprophos (Prophos) | 0.01 | 0.02 | ND | 0.01 |
| Baygon (Propoxur) | 0.01 | 0.02 | ND | 0.01 | Chlordane | 0.04 | 0.1 | ND | 0.04 |
| Chlorfenapyr | 0.03 | 0.1 | ND | 0.03 | Methyl Parathion | 0.02 | 0.1 | ND | 0.02 |
| Mevinphos | 0.05 | 0.08 | ND | 0.03 | Abamectin | 0.03 | 0.08 | ND | 0.1 |
| Acephate | 0.02 | 0.05 | ND | 0.1 | Acetamiprid | 0.01 | 0.05 | ND | 0.1 |
| Azoxystrobin | 0.01 | 0.02 | ND | 0.1 | Bifenazate | 0.01 | 0.05 | ND | 0.1 |
| Bifenthrin | 0.02 | 0.35 | ND | 3 | Boscalid | 0.01 | 0.03 | ND | 0.1 |
| Carbaryl | 0.01 | 0.02 | ND | 0.5 | Chlorantraniliprole | 0.01 | 0.04 | ND | 10 |
| Clofentazine | 0.01 | 0.03 | ND | 0.1 | Diazinon | 0.01 | 0.02 | ND | 0.1 |
| Dimethomorph | 0.02 | 0.06 | ND | 2 | Etoxazole | 0.01 | 0.05 | ND | 0.1 |
| Fenpyroximate | 0.02 | 0.1 | ND | 0.1 | Fonicamid | 0.01 | 0.02 | ND | 0.1 |
| Fludioxonil | 0.01 | 0.05 | ND | 0.1 | Hexythiazox | 0.01 | 0.03 | ND | 0.1 |
| Imidacloprid | 0.01 | 0.05 | ND | 5 | Kresoxim-methyl | 0.01 | 0.03 | ND | 0.1 |
| Malathion | 0.01 | 0.05 | ND | 0.5 | Metalaxyl | 0.01 | 0.02 | ND | 2 |
| Methomyl | 0.02 | 0.05 | ND | 1 | Myclobutanil | 0.02 | 0.07 | ND | 0.1 |
| Naled | 0.01 | 0.02 | ND | 0.1 | Oxamyl | 0.01 | 0.02 | ND | 0.5 |
| Permethrin | 0.01 | 0.02 | ND | 0.5 | Phosmet | 0.01 | 0.02 | ND | 0.1 |
| Piperonyl Butoxide | 0.02 | 0.06 | ND | 3 | Propiconazole | 0.03 | 0.08 | ND | 0.1 |
| Prallethrin | 0.02 | 0.05 | ND | 0.1 | Pyrethrin | 0.05 | 0.41 | ND | 0.5 |
| Pyridaben | 0.02 | 0.07 | ND | 0.1 | Spinosad A | 0.01 | 0.05 | ND | 0.1 |
| Spinosad D | 0.01 | 0.05 | ND | 0.1 | Spiromesifen | 0.02 | 0.06 | ND | 0.1 |
| Spirotetramat | 0.01 | 0.02 | ND | 0.1 | Tebuconazole | 0.01 | 0.02 | ND | 0.1 |
| Thiamethoxam | 0.01 | 0.02 | ND | 5 | Trifloxystrobin | 0.01 | 0.02 | ND | 0.1 |
| Acequinocyl | 0.02 | 0.09 | ND | 0.1 | Captan | 0.01 | 0.02 | ND | 0.7 |
| Cypermethrin | 0.02 | 0.1 | ND | 1 | Cyfluthrin | 0.04 | 0.1 | ND | 2 |
| Fenhexamid | 0.02 | 0.07 | ND | 0.1 | Spinetoram J.L | 0.02 | 0.07 | ND | 0.1 |
| Pentachloronitrobenzene | 0.01 | 0.1 | ND | 0.1 | | | | | |

RES - Residual Solvents Testing Analysis

Analyzed Apr 05, 2023 | Instrument GC/FID with Headspace Analyzer | Method SOP-006

| Analyte | LOD ug/g | LOQ ug/g | Result ug/g | Limit ug/g | Analyte | LOD ug/g | LOQ ug/g | Result ug/g | Limit ug/g |
|----------------------------|----------|----------|-------------|------------|-------------------------------|----------|----------|-------------|------------|
| Propane (Prop) | 0.4 | 40.0 | ND | 5000.0 | Butane (But) | 0.4 | 40.0 | ND | 5000.0 |
| Methanol (Metha) | 0.4 | 40.0 | ND | 3000.0 | Ethylene Oxide (EthOx) | 0.4 | 0.8 | ND | 1.0 |
| Pentane (Pen) | 0.4 | 40.0 | ND | 5000.0 | Ethanol (Ethan) | 0.4 | 40.0 | ND | 5000.0 |
| Ethyl Ether (EthEt) | 0.4 | 40.0 | ND | 5000.0 | Acetone (Acet) | 0.4 | 40.0 | ND | 5000.0 |
| Isopropanol (2-Pro) | 0.4 | 40.0 | ND | 5000.0 | Acetonitrile (Acetonit) | 0.4 | 40.0 | ND | 410.0 |
| Methylene Chloride (MetCh) | 0.4 | 0.8 | 5.5 | 1.0 | Hexane (Hex) | 0.4 | 40.0 | ND | 290.0 |
| Ethyl Acetate (EthAc) | 0.4 | 40.0 | ND | 5000.0 | Chloroform (Clo) | 0.4 | 0.8 | ND | 1.0 |
| Benzene (Ben) | 0.4 | 0.8 | ND | 1.0 | 1,2-Dichloroethane (1,2-Dich) | 0.4 | 0.8 | ND | 1.0 |
| Heptane (Hep) | 0.4 | 40.0 | ND | 5000.0 | Trichloroethylene (TriClEtH) | 0.4 | 0.8 | ND | 1.0 |
| Toluene (Toluene) | 0.4 | 40.0 | ND | 890.0 | Xylenes (Xyl) | 0.4 | 40.0 | ND | 2170.0 |

FVI - Filth & Foreign Material Inspection Analysis

Analyzed Apr 04, 2023 | Instrument Microscope | Method SOP-010

| Analyte / Limit | Result | Analyte / Limit | Result |
|--|--------|--|--------|
| > 1/4 of the total sample area covered by sand, soil, cinders, or dirt | ND | > 1/4 of the total sample area covered by mold | ND |
| > 1 insect fragment, 1 hair, or 1 count mammalian excreta per 3g | ND | > 1/4 of the total sample area covered by an imbedded foreign material | ND |

UI Not Identified
 ND Not Detected
 N/A Not Applicable
 NT Not Reported
 LOD Limit of Detection
 LOQ Limit of Quantification
 <LOQ Detected
 >ULOL Above upper limit of linearity
 CFU/g Colony Forming Units per 1 gram
 TNTC Too Numerous to Count



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