Georgia QA Testing

PharmLabs San Diego Certificate of Analysis

Sample **Mango Kush**

Delta9 THC	THCa	Total THC (THCa * 0.877 + THC)	Delta8 THC
UI	0.13%	0.11%	2.32%

Sample ID **SD250515-018 (114032)** Matrix **Flower**

Tested for **Gorilla Hemp Company**

Sampled - Received **May 15, 2025** Reported **May 29, 2025**

Analyses executed **GA-FPC**

Laboratory note: The Δ9-THC results in this particular sample is inconclusive due to potential interferences from several cannabinoids when analyzed using our GC MS/MS D9C method. As a result, this sample will not undergo testing via the GC MS/MS D9C method. However, there are currently no interferences detected with any other cannabinoids in this sample when employing HPLC. COA Update: 5/14/25 "Tested For" corrected as per client request.

CANx - Cannabinoids

Analyzed **May 22, 2025** | Instrument **HPLC-VWD** | Method **SOP-001**

The expanded Uncertainty of the Cannabinoids analysis is approximately **±7.81%** at the 95% Confidence Level

Analyte	LOD mg/g	LOQ mg/g	Result %	Result mg/g
11-Hydroxy-Δ8-Tetrahydrocannabivarin (11-Hyd-Δ8-THCV)	0.013	0.041	ND	ND
Cannabidiorcin (CBDO)	0.006	0.02	ND	ND
Abnormal Cannabidiorcin (a-CBDO)	0.013	0.038	ND	ND
(+/-)-9B-hydroxy-Hexahydrocannibinol (9b-HHC)	0.015	0.045	ND	ND
11-Hydroxy-Δ8-Tetrahydrocannabinol (11-Hyd-Δ8-THC)	0.015	0.045	ND	ND
Cannabidiolic Acid (CBDA)	0.033	0.16	2.49	24.91
Cannabigerol Acid (CBGA)	0.033	0.16	7.19	71.89
Cannabigerol (CBG)	0.048	0.16	1.09	10.88
Cannabidiol (CBD)	0.069	0.229	1.34	13.44
1(S)-Tetrahydrocannabidiol (1(S)-H4-CBD)	0.008	0.026	ND	ND
1(R)-Tetrahydrocannabidiol (1(R)-H4-CBD)	0.016	0.049	ND	ND
Tetrahydrocannabivarin (THCV)	0.049	0.162	ND	ND
Δ8-tetrahydrocannabivarin (Δ8-THCV)	0.012	0.036	ND	ND
Cannabidihexol (CBDH)	0.014	0.042	ND	ND
Tetrahydrocannabutol (Δ9-THCB)	0.01	0.029	ND	ND
Cannabinol (CBN)	0.047	0.16	0.06	0.60
Cannabidiphorol (CBDP)	0.016	0.049	ND	ND
exo-THC (exo-THC)	0.016	0.8	ND	ND
Tetrahydrocannabinol (Δ9-THC)	0.092	0.307	UI	UI
Δ8-tetrahydrocannabinol (Δ8-THC)	0.044	0.16	2.32	23.22
(6aR,9S)-Δ10-Tetrahydrocannabinol ((6aR,9S)-Δ10)	0.015	0.8	ND	ND
Hexahydrocannabinol (S Isomer) (9s-HHC)	0.017	0.8	0.54	5.40
(6aR,9R)-Δ10-Tetrahydrocannabinol ((6aR,9R)-Δ10)	0.007	0.8	ND	ND
Hexahydrocannabinol (R Isomer) (9r-HHC)	0.016	0.8	0.98	9.80
Tetrahydrocannabinolic Acid (THCA)	0.117	0.389	0.13	1.27
Δ9-Tetrahydrocannabihexol (Δ9-THCH)	0.02	0.061	ND	ND
Cannabinol Acetate (CBNO)	0.009	0.027	ND	ND
9(S)-Hexahydrocannabinolic Acid (9(S)-HHCa)	0.063	0.065	ND	ND
9(R)-Hexahydrocannabinolic Acid (9(R)-HHCa)	0.191	0.196	ND	ND
Δ9-Tetrahydrocannabiphorol (Δ9-THCP)	0.017	0.8	1.91	19.13
Δ8-Tetrahydrocannabiphorol (Δ8-THCP)	0.041	0.8	0.23	2.31
Cannabicitran (CBT)	0.005	0.16	ND	ND
Δ8-THC-O-acetate (Δ8-THCO)	0.076	0.8	ND	ND
9(S)-HHCP (s-HHCP)	0.013	0.041	ND	ND
Δ9-THC-O-acetate (Δ9-THCO)	0.066	0.8	ND	ND
9(R)-HHCP (r-HHCP)	0.015	0.045	0.10	0.95
9(S)-HHC-O-acetate (s-HHCO)	0.037	0.112	ND	ND
9(R)-HHC-O-acetate (r-HHCO)	0.031	0.093	ND	ND
3-octyl-Δ8-Tetrahydrocannabinol (Δ8-THC-C8)	0.021	0.062	ND	ND
Total THC (THCa * 0.877 + Δ9THC)			0.11	1.11
Total THC + Δ8THC + Δ10THC (THCa * 0.877 + Δ9THC + Δ8THC + Δ10THC)			2.43	24.33
Total CBD (CBDa * 0.877 + CBD)			3.53	35.29
Total CBG (CBGa * 0.877 + CBG)			7.39	73.93
Total HHC (9r-HHC + 9s-HHC)			1.52	15.20
Total Cannabinoids Analyzed			17.17	171.74

*Dry Weight %

HME - Heavy Metals

Analyzed **May 21, 2025** | Instrument **ICP/MSMS** | Method **SOP-005**

Analyte	LOD ug/g	LOQ ug/g	Result ug/g	Limit ug/g
Arsenic (As)	0.0009	0.0027	0.07	0.2
Cadmium (Cd)	0.0005	0.0015	0.03	0.2
Mercury (Hg)	0.0058	0.0174	ND	0.2
Lead (Pb)	0.0006	0.0018	0.17	0.2

UI Unidentified
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

PJLA Testing Acc. #85368

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DEA license: RP0611043
ISO/IEC 17025:2017 Acc. 85368

Scan the QR code to verify authenticity.

Authorized Signature

Brandon Starr

Brandon Starr, Quality Assurance Manager
Thu, 29 May 2025 15:40:26 -0700

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MIBIG - Microbial

Analyzed **May 19, 2025** | Instrument **qPCR and/or Plating** | Method **SOP-007**

Analyte	LOD CFU/g	LOQ CFU/g	Result CFU/g	Limit CFU/g
Shiga toxin-producing Escherichia Coli	1.0	1.0	ND	1
Salmonella spp.	1.0	1.0	ND	N/A
Aspergillus fumigatus	1.0	1.0	Negative	1
Aspergillus flavus	1.0	1.0	Negative	1
Aspergillus niger	1.0	1.0	Negative	1
Aspergillus terreus	1.0	1.0	Negative	1

MTO - Mycotoxin

Analyzed **May 19, 2025** | Instrument **LC/MSMS** | Method **SOP-004**

Analyte	LOD ug/kg	LOQ ug/kg	Result ug/kg	Limit ug/kg	Analyte	LOD ug/kg	LOQ ug/kg	Result ug/kg	Limit ug/kg
Ochratoxin A	5.0	20.0	ND	20	Aflatoxin B1	2.5	5.0	ND	20
Aflatoxin B2	2.5	5.0	ND	20	Aflatoxin G1	2.5	5.0	ND	20
Aflatoxin G2	2.5	5.0	ND	20	Total Aflatoxins	10.0	20.0	ND	20

UI Unidentified
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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PES - Pesticides

Analyzed **May 19, 2025** | 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	0.01	0.02	ND	0.02	Carbofuran	0.01	0.02	ND	0.02
Dimethoate	0.01	0.02	ND	0.02	Etofenprox	0.02	0.1	ND	0.1
Fenoxycarb	0.01	0.02	ND	0.02	Thiachloprid	0.01	0.02	ND	0.02
Daminozide	0.01	0.03	ND	0.03	Dichlorvos	0.02	0.07	ND	0.07
Imazalil	0.02	0.07	ND	0.07	Methiocarb	0.01	0.02	ND	0.02
Spiroxamine	0.01	0.02	ND	0.02	Coumaphos	0.01	0.02	ND	0.02
Fipronil	0.01	0.1	ND	0.1	Paclobutrazol	0.01	0.03	ND	0.03
Chlorpyrifos	0.01	0.04	ND	0.04	Ethoprophos (Prophos)	0.01	0.02	ND	0.02
Baygon (Propoxur)	0.01	0.02	ND	0.02	Chlordane	0.04	0.1	ND	0.1
Chlorfenapyr	0.03	0.1	ND	0.1	Methyl Parathion	0.02	0.1	ND	0.1
Mevinphos	0.03	0.08	ND	0.08	Abamectin	0.03	0.08	ND	0.08
Acephate	0.02	0.05	ND	0.05	Acetamiprid	0.01	0.05	ND	0.05
Azoxystrobin	0.01	0.02	ND	0.02	Bifenazate	0.01	0.05	<LOQ	0.05
Bifenthrin	0.02	0.35	ND	0.1	Boscalid	0.01	0.03	ND	0.03
Carbaryl	0.01	0.02	ND	0.02	Chlorantraniliprole	0.01	0.04	ND	0.04
Clofentezine	0.01	0.03	ND	0.03	Diazinon	0.01	0.02	ND	0.02
Dimethomorph	0.02	0.06	ND	0.06	Etoxazole	0.01	0.05	ND	0.05
Fenpyroximate	0.02	0.1	ND	0.1	Flonicamid	0.01	0.02	ND	0.02
Fludioxonil	0.01	0.05	ND	0.05	Hexythiazox	0.01	0.03	ND	0.03
Imidacloprid	0.01	0.05	ND	0.05	Kresoxim-methyl	0.01	0.03	ND	0.03
Malathion	0.01	0.05	ND	0.05	Metalaxyl	0.01	0.02	ND	0.02
Methomyl	0.02	0.05	ND	0.05	Myclobutanil	0.02	0.07	ND	0.07
Naled	0.01	0.02	ND	0.02	Oxamyl	0.01	0.02	ND	0.02
Permethrin	0.01	0.02	ND	0.02	Phosmet	0.01	0.02	ND	0.02
Piperonyl Butoxide	0.02	0.06	ND	0.06	Propiconazole	0.03	0.08	ND	0.08
Prallethrin	0.02	0.05	<LOQ	0.05	Pyrethrin	0.05	0.41	ND	0.1
Pyridaben	0.02	0.07	ND	0.07	Spinosad A	0.01	0.05	ND	0.05
Spinosad D	0.01	0.05	ND	0.05	Spiromesifen	0.02	0.06	ND	0.06
Spirotetramat	0.01	0.02	ND	0.02	Tebuconazole	0.01	0.02	ND	0.02
Thiamethoxam	0.01	0.02	ND	0.02	Trifloxystrobin	0.01	0.02	ND	0.02
Acequinocyl	0.02	0.09	ND	0.09	Captan	0.01	0.02	<LOQ	0.02
Cypermethrin	0.02	0.1	ND	0.1	Cyfluthrin	0.04	0.1	ND	0.1
Fenhexamid	0.02	0.07	ND	0.07	Spinetoram J,L	0.02	0.07	ND	0.07
Pentachloronitrobenzene	0.01	0.1	ND	0.1					

RES - Residual Solvents

Analyzed **May 16, 2025** | 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)	0.044	0.4	72.1	N/A	Butane (But)	0.02	0.4	56.6	800
Methanol (Metha)	1.176	3.92	1767.8	N/A	Ethylene Oxide (EthOx)	0.08	0.4	ND	N/A
Pentane (Pen)	0.024	0.4	ND	N/A	Ethanol (Ethan)	0.048	0.4	<LOQ	5000
Ethyl Ether (EthEt)	0.036	0.4	ND	N/A	Acetone (Acet)	0.044	0.4	140.9	N/A
Isopropanol (2-Pro)	1.16	3.868	<LOQ	N/A	Acetonitrile (Acetonit)	0.888	2.952	<LOQ	N/A
Methylene Chloride (MetCh)	0.04	0.4	ND	N/A	Hexane (Hex)	0.012	0.4	ND	100
Ethyl Acetate (EthAc)	0.032	0.4	ND	N/A	Chloroform (Clo)	0.028	0.4	ND	N/A
Benzene (Ben)	0.012	0.4	ND	N/A	1-2-Dichloroethane (12-Dich)	0.024	0.4	ND	N/A
Heptane (Hep)	0.012	0.4	ND	500	Trichloroethylene (TriClEth)	0.072	0.4	ND	N/A
Toluene	0.036	0.4	<LOQ	N/A	Xylenes (Xyl)	0.012	0.4	ND	N/A

FVI - Filth & Foreign Material Inspection

Analyzed **May 16, 2025** | 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

MWA - Moisture Content & Water Activity

Analyzed **May 12, 2025** | Instrument **Chilled-mirror Dewpoint and Capacitance** | Method **SOP-008**

Analyte	LOD %	LOQ %	Result	Limit	Analyte	LOD %	LOQ %	Result	Limit
Moisture (Moi)	0.0	0.0	6.8 % Mw	% Mw	Water Activity (WA)	0.03	0.03	0.49 a_w	a_w

MICx - Microbial X

Analyzed **May 28, 2025** | Instrument **Plating** | Method **SOP-007**

Analyte	LOD CFU/G	LOQ CFU/G	Result CFU/G	Limit CFU/G
Total Yeast & Molds (TYM)	1.0	1.0	20	10000
Listeria (LIS)	1.0	1.0	ND	N/A
Gram Negative Bacteria (BTGN)	1.0	1.0	24	1000
Total Viable Aerobic Bacteria (TVAB)	1.0	1.0	79	100000

UI Unidentified
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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