

PharmLabs San Diego Certificate of Analysis



Sample **Kruz Blueberry Kush 1/2G**

Delta9 THC UI	THCa 21.42%	Total THC (THCa * 0.877 + THC) 18.79%	Delta8 THC 11.50%
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Sample ID SD230725-066 (81647)	Matrix Flower
Tested for Kruz	
Sampled -	Received Jul 25, 2023
Analyses executed FP-IO20, QARUSH	Reported Sep 01, 2023

Laboratory note: The estimated concentration of the unknown peak in the sample is 1.78% | 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 (+)δ8-THC or d9-THC. At this time there are no reference standards available for (+)δ8-THC. (+)δ8-THC is a different compound from the main (-)δ8-THC cannabinoid and, therefore, these two compounds may have different efficacies. Using the most advanced instruments and techniques available, the separation of (+)δ8-THC and d9-THC is problematic for the scientific community as a whole. PharmLabs believes the unidentified peak to be a combination of (+)δ8-THC and d9-THC with the majority, if not all, of the concentration being (+)δ8-THC. Total (+/-) D8 Concentration is estimated to be: 11.50%

CANx - Cannabinoids

Analyzed Jul 28, 2023 | Instrument HPLC-VWD | Method SOP-001
The expanded Uncertainty of the Cannabinoids analysis is approximately ±7.806% at the 95% Confidence Level

Analyte	LOD mg/g	LOQ mg/g	Result %	Result mg/g	Sample photography
11-Hydroxy-Δ8-Tetrahydrocannabivarin (11-Hyd-Δ8-THCV)	0.013	0.041	ND	ND	
Cannabidiol (CBDO)	0.006	0.02	ND	ND	
Abnormal Cannabidiol (a-CBDO)	0.013	0.038	ND	ND	
(+/-)-9B-hydroxy-Hexahydrocannabinol (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	6.98	69.76	
Cannabigerol Acid (CBGA)	0.033	0.16	2.07	20.68	
Cannabigerol (CBG)	0.048	0.16	0.29	2.92	
Cannabidiol (CBD)	0.069	0.229	1.03	10.34	
1(S)-Tetrahydrocannabinol (1(S)-H4-CBD)	0.008	0.026	ND	ND	
1(R)-Tetrahydrocannabinol (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	
Cannabidiol (CBDH)	0.005	0.16	ND	ND	
Tetrahydrocannabinol (Δ9-THCB)	0.01	0.029	ND	ND	
Cannabinol (CBN)	0.047	0.16	4.53	45.28	
Cannabidiophorol (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	11.50	115.00	
(6aR,9S)-Δ10-Tetrahydrocannabinol ((6aR,9S)-Δ10)	0.015	0.8	ND	ND	
Hexahydrocannabinol (S Isomer) (9s-HHC)	0.017	0.8	0.56	5.63	
(6aR,9R)-Δ10-Tetrahydrocannabinol ((6aR,9R)-Δ10)	0.007	0.8	ND	ND	
Hexahydrocannabinol (R Isomer) (9r-HHC)	0.016	0.8	0.86	8.58	
Tetrahydrocannabinolic Acid (THCA)	0.117	0.389	21.42	214.21	
Δ9-Tetrahydrocannabinol (Δ9-THCH)	0.02	0.061	ND	ND	
Cannabinol Acetate (CBNO)	0.009	0.027	ND	ND	
Δ9-Tetrahydrocannabinol (Δ9-THCP)	0.017	0.8	ND	ND	
Δ8-Tetrahydrocannabinol (Δ8-THCP)	0.041	0.8	ND	ND	
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	ND	ND	
9(S)-HHC-O-acetate (s-HHCO)	0.005	0.16	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)			18.79	187.87	
Total THC + Δ8THC + Δ10THC (THCa * 0.877 + Δ9THC + Δ8THC + Δ10THC)			30.29	302.87	
Total CBD (CBDA * 0.877 + CBD)			7.15	71.52	
Total CBG (CBGA * 0.877 + CBG)			2.11	21.05	
Total HHC (9r-HHC + 9s-HHC)			1.42	14.21	
Total Cannabinoids Analyzed			45.49	454.93	

*Dry Weight %

HME - Heavy Metals

Analyzed Jul 28, 2023 | 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	0.15	1.5
Cadmium (Cd)	0.0005	0.0015	0.06	0.5
Mercury (Hg)	0.0058	0.0174	0.00	3
Lead (Pb)	0.0006	0.0018	0.11	0.5

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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DEA license: RP0611043
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Authorized Signature

Brandon Starr

Brandon Starr, Quality Assurance Manager
Fri, 01 Sep 2023 17:16:46 -0700

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MIBIG - Microbial

Analyzed Jul 27, 2023 | 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	Negative	1
Salmonella spp.	1.0	1.0	Negative	1
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 Jul 26, 2023 | 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	-
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 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
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PES - Pesticides

Analyzed Jul 28, 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	0.01	0.02	ND		Carbofuran	0.01	0.02	ND	
Dimethoate	0.01	0.02	ND		Etofenprox	0.02	0.1	ND	
Fenoxycarb	0.01	0.02	ND		Thiachloprid	0.01	0.02	ND	
Daminozide	0.01	0.03	ND		Dichlorvos	0.02	0.07	ND	
Imazalil	0.02	0.07	ND		Methiocarb	0.01	0.02	ND	
Spiroxamine	0.01	0.02	ND		Coumaphos	0.01	0.02	ND	
Fipronil	0.01	0.1	ND		Paclobutrazol	0.01	0.03	ND	
Chlorpyrifas	0.01	0.04	ND		Ethoprophos (Prophos)	0.01	0.02	ND	
Baygon (Propoxur)	0.01	0.02	ND		Chlordane	0.04	0.1	ND	
Chlorfenapyr	0.03	0.1	<LOQ		Methyl Parathion	0.02	0.1	ND	
Mevinphos	0.03	0.08	ND		Abamectin	0.03	0.08	ND	
Acephate	0.02	0.05	ND		Acetamiprid	0.01	0.05	ND	
Azoxystrobin	0.01	0.02	ND		Bifenazote	0.01	0.05	ND	
Bifenthrin	0.02	0.35	ND		Boscalid	0.01	0.03	ND	
Carbaryl	0.01	0.02	ND		Chlorantranilprole	0.01	0.04	ND	
Clofentezine	0.01	0.03	ND		Diazinon	0.01	0.02	ND	
Dimethomorph	0.02	0.06	ND		Etoazole	0.01	0.05	ND	
Fenpyroximate	0.02	0.1	ND		Flonicamid	0.01	0.02	ND	
Fludioxonil	0.01	0.05	ND		Hexythiazox	0.01	0.03	ND	
Imidacloprid	0.01	0.05	ND		Kresoxim-methyl	0.01	0.03	ND	
Malathion	0.01	0.05	ND		Metaxalyl	0.01	0.02	ND	
Methomyl	0.02	0.05	ND		Myclobutanil	0.02	0.07	ND	
Naled	0.01	0.02	ND		Oxamyl	0.01	0.02	ND	
Permethrin	0.01	0.02	ND		Phosmet	0.01	0.02	ND	
Piperonyl Butoxide	0.02	0.06	ND		Propiconazole	0.03	0.08	ND	
Prallethrin	0.02	0.05	ND		Pyrethrin	0.05	0.41	ND	
Pyridaben	0.02	0.07	ND		Spinosad A	0.01	0.05	ND	
Spinosad D	0.01	0.05	ND		Spiromesifen	0.02	0.06	ND	
Spirotetramat	0.01	0.02	ND		Tebuconazole	0.01	0.02	ND	
Thiamethoxam	0.01	0.02	ND		Trifloxystrobin	0.01	0.02	ND	
Acequinocyl	0.02	0.09	ND		Captan	0.01	0.02	ND	
Cypermethrin	0.02	0.1	ND		Cyfluthrin	0.04	0.1	ND	
Fenhexamid	0.02	0.07	ND		Spinetoram J.L	0.02	0.07	ND	
Pentachloronitrobenzene	0.01	0.1	ND		Chlormequat Chloride	0.02	0.1	NT	

RES - Residual Solvents

Analyzed Sep 01, 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)	0.044	0.4	ND		Butane (But)	0.02	0.4	ND	
Methanol (Metha)	1.176	3.92	ND		Ethylene Oxide (EthOx)	0.08	0.4	ND	
Pentane (Pen)	0.024	0.4	ND		Ethanol (Ethan)	0.048	0.4	ND	
Ethyl Ether (EthEt)	0.036	0.4	ND		Acetone (Acet)	0.044	0.4	<LOQ	
Isopropanol (2-Pro)	1.16	3.868	ND		Acetonitrile (Acetonit)	0.888	2.952	ND	
Methylene Chloride (MetCh)	0.04	0.4	ND		Hexane (Hex)	0.012	0.4	ND	
Ethyl Acetate (EthAc)	0.032	0.4	ND		Chloroform (Clo)	0.028	0.4	29.2	
Benzene (Ben)	0.012	0.4	ND		1-2-Dichloroethane (12-Dich)	0.024	0.4	ND	
Heptane (Hep)	0.012	0.4	ND		Trichloroethylene (TriClEth)	0.072	0.4	ND	
Toluene	0.036	0.4	ND		Xylenes (Xyl)	0.012	0.4	ND	

FVI - Filth & Foreign Material Inspection

Analyzed Jul 26, 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

MWA - Moisture Content & Water Activity

Analyzed Jul 26, 2023 | 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	13 % Mw	Water Activity (wA)	0.03	0.03	0.49 a _w	0.85 a _w

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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