

PharmLabs San Diego Certificate of Analysis



Sample Panama Punch

Delta9 THC UI	THCa 10.04%	Total THC (THC + THCa) 10.04%	Delta8 THC 6.05%
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Sample ID SD240329-062 (92650)	Matrix Flower (Inhalable Cannabis Good)	Batch ID/Lot ID KRUZ.PP.02.05.2024
Tested for Kruz	Received Mar 29, 2024	Reported Apr 03, 2024
Sampled -		
Analyses executed FP-IF20		

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.

CANX - Cannabinoids Analysis

Analyzed Apr 01, 2024 | Instrument HPLC-VWD | Method SOP-001
 The expanded Uncertainty of the Cannabinoid analysis is approximately ±.81% 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	6.43	64.32
Cannabigerol Acid (CBGA)	0.001	0.16	2.32	23.25
Cannabigerol (CBG)	0.001	0.16	0.23	2.31
Cannabidiol (CBD)	0.001	0.16	5.02	50.16
1(S)-THD (s-THD)	0.013	0.041	ND	ND
1(R)-THD (r-THD)	0.025	0.075	ND	ND
Tetrahydrocannabivarin (THCV)	0.001	0.16	ND	ND
Δ8-tetrahydrocannabivarin (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	0.07	0.70
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	6.05	60.48
(6aR,9S)-Δ10-Tetrahydrocannabinol ((6aR,9S)-Δ10)	0.015	0.16	ND	ND
Hexahydrocannabinol (S Isomer) (9s-HHC)	0.017	0.16	0.12	1.24
(6aR,9R)-Δ10-Tetrahydrocannabinol ((6aR,9R)-Δ10)	0.007	0.16	ND	ND
Hexahydrocannabinol (R Isomer) (9r-HHC)	0.016	0.16	0.60	6.00
Tetrahydrocannabinolic Acid (THCA)	0.001	0.16	11.45	114.47
Δ9-Tetrahydrocannabinol (Δ9-THCH)	0.024	0.071	ND	ND
Cannabinol Acetate (CBNO)	0.014	0.043	ND	ND
Δ9-Tetrahydrocannabinophorol (Δ9-THCP)	0.017	0.16	ND	ND
Δ8-Tetrahydrocannabinophorol (Δ8-THCP)	0.041	0.16	ND	ND
Cannabicitran (CBT)	0.005	0.16	0.24	2.44
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
9(R)-HHC-O-acetate (r-HHCO)	0.008	0.025	ND	ND
3-octyl-Δ8-Tetrahydrocannabinol (Δ8-THC-C8)	0.067	0.204	ND	ND
Total THC (THCa * 0.877 + Δ9THC)			10.04	100.39
Total THC + Δ8THC + Δ10THC (THCa * 0.877 + Δ9THC + Δ8THC + Δ10THC)			16.09	160.87
Total CBD (CBDA * 0.877 + CBD)			10.66	106.57
Total CBG (CBGA * 0.877 + CBG)			2.27	22.70
Total HHC (9r-HHC + 9s-HHC)			0.72	7.24
Total Cannabinoids Analyzed			30.05	300.52

*Dry Weight %

HME - Heavy Metals Analysis

Analyzed Mar 29, 2024 | 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	ND	1.5
Cadmium (Cd)	0.0005	0.0015	0.04	0.5
Mercury (Hg)	0.0058	0.0174	ND	3
Lead (Pb)	0.0006	0.0018	0.15	0.5
Nickel (Ni)	6.0e-05	0.0002	NT	

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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Authorized Signature

Brandon Starr

Brandon Starr, Lab Manager
 Wed, 03 Apr 2024 15:06:41 -0700

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MIBIG - Microbial Analysis

Analyzed Apr 03, 2024 | Instrument qPCR and/or Plating | Method SOP-007

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

MTO - Mycotoxin Analysis

Analyzed Apr 03, 2024 | Instrument LC/MSMS | Method SOP-004

Analyte	LOD ug/kg	LOQ ug/kg	Result ug/kg (ppb)	Limit ug/kg	Analyte	LOD ug/kg	LOQ 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 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 Analysis

Analyzed Apr 03, 2024 | 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
Imazalil	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	NT	0.01	Paclobotrazol	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	NT	0.04
Chlorfenapyr	0.03	0.1	NT	0.03	Methyl Parathion	0.02	0.1	NT	0.02
Mevinphos	0.03	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
Clofentezine	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	Flonicamid	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	NT	1	Cyfluthrin	0.04	0.1	NT	2
Fenhexamid	0.02	0.07	ND	0.1	Spinetoram J.L	0.02	0.07	ND	0.1
Pentachloronitrobenzene	0.01	0.1	NT	0.1					

FVI - Filth & Foreign Material Inspection Analysis

Analyzed Mar 29, 2024 | 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 Analysis

Analyzed Mar 29, 2024 | 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	6.6 % Mw	13 % Mw	Water Activity (wA)	0.03	0.03	0.48 aw	0.85 aw

UJ 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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