

PharmLabs San Diego Certificate of Analysis

Sample ASTRO8 - HH - 2G - PR - BERRY BOREALIS - GA

Delta9 THC UI	THCa 0.16%	Total THC (THCa * 0.877 + THC) 0.14%	Delta8 THC 8.22%
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Sample ID SD250424-076 (112592)	Matrix Flower
Tested for A8 Industries	
Sampled -	Received Apr 24, 2025
Analyses executed MICX, FP-IO20	Reported May 05, 2025
	Unit Mass (g) 2.0

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

Analyzed Apr 25, 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	Result mg/Unit
11-Hydroxy-Δ8-Tetrahydrocannabivarin (11-Hyd-Δ8-THCV)	0.013	0.041	ND	ND	ND
Cannabidiolcin (CBDO)	0.006	0.02	ND	ND	ND
Abnormal Cannabidiolcin (a-CBDO)	0.013	0.038	ND	ND	ND
(±)-9B-hydroxy-Hexahydrocannabinol (9b-HHC)	0.015	0.045	ND	ND	ND
11-Hydroxy-Δ8-Tetrahydrocannabinol (11-Hyd-Δ8-THC)	0.015	0.045	ND	ND	ND
Cannabidiolic Acid (CBDA)	0.033	0.16	0.05	0.51	1.02
Cannabigerol Acid (CBGA)	0.033	0.16	<LOQ	<LOQ	<LOQ
Cannabigerol (CBG)	0.048	0.16	ND	ND	ND
Cannabidiol (CBD)	0.069	0.229	0.06	0.59	1.18
1(S)-Tetrahydrocannabidiol (1(S)-H4-CBD)	0.008	0.026	ND	ND	ND
1(R)-Tetrahydrocannabidiol (1(R)-H4-CBD)	0.016	0.049	ND	ND	ND
Tetrahydrocannabivarin (THCV)	0.049	0.162	ND	ND	ND
Δ8-tetrahydrocannabivarin (Δ8-THCV)	0.012	0.036	0.06	0.55	1.10
Cannabidihexol (CBDH)	0.014	0.042	ND	ND	ND
Tetrahydrocannabutol (Δ9-THCB)	0.01	0.029	ND	ND	ND
Cannabinol (CBN)	0.047	0.16	2.39	23.90	47.80
Cannabidiaphoral (CBDP)	0.016	0.049	ND	ND	ND
exo-THC (exo-THC)	0.016	0.8	ND	ND	ND
Tetrahydrocannabinol (Δ9-THC)	0.092	0.307	UI	UI	UI
Δ8-tetrahydrocannabinol (Δ8-THC)	0.044	0.16	8.22	82.19	164.38
(6aR,9S)-Δ10-Tetrahydrocannabinol ((6aR,9S)-Δ10)	0.015	0.8	ND	ND	ND
Hexahydrocannabinol (S Isomer) (9s-HHC)	0.017	0.8	1.55	15.46	30.92
(6aR,9R)-Δ10-Tetrahydrocannabinol ((6aR,9R)-Δ10)	0.007	0.8	ND	ND	ND
Hexahydrocannabinol (R Isomer) (9r-HHC)	0.016	0.8	4.46	44.62	89.24
Tetrahydrocannabinolic Acid (THCA)	0.117	0.389	0.16	1.61	3.22
Δ9-Tetrahydrocannabihexol (Δ9-THCH)	0.02	0.061	ND	ND	ND
Cannabinol Acetate (CBNO)	0.009	0.027	ND	ND	ND
9(S)-Hexahydrocannabinolic Acid (9(S)-HHCa)	0.063	0.065	ND	ND	ND
9(R)-Hexahydrocannabinolic Acid (9(R)-HHCa)	0.191	0.196	ND	ND	ND
Δ9-Tetrahydrocannabiphoral (Δ9-THCP)	0.017	0.8	2.30	23.05	46.10
Δ8-Tetrahydrocannabiphoral (Δ8-THCP)	0.041	0.8	ND	ND	ND
Cannabicitran (CBT)	0.005	0.16	ND	ND	ND
Δ8-THC-O-acetate (Δ8-THCO)	0.076	0.8	ND	ND	ND
9(S)-HHCP (s-HHCP)	0.013	0.041	ND	ND	ND
Δ9-THC-O-acetate (Δ9-THCO)	0.066	0.8	ND	ND	ND
9(R)-HHCP (r-HHCP)	0.015	0.045	ND	ND	ND
9(S)-HHC-O-acetate (s-HHCO)	0.037	0.112	ND	ND	ND
9(R)-HHC-O-acetate (r-HHCO)	0.031	0.093	ND	ND	ND
3-octyl-Δ8-Tetrahydrocannabinol (Δ8-THC-C8)	0.021	0.062	ND	ND	ND
Total THC ( THCa * 0.877 + Δ9THC )			0.14	1.41	2.82
Total THC + Δ8THC + Δ10THC ( THCa * 0.877 + Δ9THC + Δ8THC + Δ10THC )			8.36	83.60	167.20
Total CBD ( CBDA * 0.877 + CBD )			0.10	1.04	2.07
Total CBG ( CBGA * 0.877 + CBG )			ND	ND	ND
Total HHC ( 9r-HHC + 9s-HHC )			6.01	60.08	120.16
Total Cannabinoids Analyzed			19.22	192.22	384.44

\*Dry Weight %

HME - Heavy Metals

Analyzed Apr 29, 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	0.00	0.2
Cadmium (Cd)	0.0005	0.0015	0.00	0.2
Mercury (Hg)	0.0058	0.0174	0.00	0.2
Lead (Pb)	0.0006	0.0018	0.00	0.2

UI Unidentified  
ND Not Detected  
N/A Not Applicable  
NT Not Reported  
LOD Limit of Detection  
<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, Quality Assurance Manager  
Mon, 05 May 2025 13:01:07 -0700

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MIBIG - Microbial

Analyzed Apr 28, 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	ND	1
Aspergillus flavus	1.0	1.0	ND	1
Aspergillus niger	1.0	1.0	ND	1
Aspergillus terreus	1.0	1.0	ND	1

MTO - Mycotoxin

Analyzed Apr 29, 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 01, 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
Chlorpyrifas	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	Bifenazote	0.01	0.05	ND	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	Chlorantranilprole	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	Metaxalyl	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	ND	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	ND	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 Apr 29, 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	73.1	N/A	Butane (But)	0.02	0.4	57.5	800
Methanol (Metha)	1.176	3.92	1839.9	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	104.4	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	ND	N/A	Xylenes (Xyl)	0.012	0.4	ND	N/A

FVI - Filth & Foreign Material Inspection

Analyzed Apr 24, 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 Apr 25, 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	5.8 % Mw	% Mw	Water Activity (wA)	0.03	0.03	0.42 a <sub>w</sub>	a <sub>w</sub>

MICx - Microbial X

Analyzed Apr 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	ND	10000
Listeria (LIS)	1.0	1.0	ND	N/A
Gram Negative Bacteria (BTGN)	1.0	1.0	ND	1000
Total Viable Aerobic Bacteria (TVAB)	1.0	1.0	ND	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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