Georgia QA Testing

PharmLabs San Diego Certificate of Analysis

Sample **ASTRO 8 - 3G - THCP - HHB - UNRULY OG - GA**

Delta9 THC **ND**	THCa **ND**	Total THC (THCa * 0.877 + THC) **ND**	Delta8 THC **ND**

Sample ID **SD250811-092 (120913)** Matrix **Flower**
Tested for **ASTRO 8**
Sampled **-** Received **Aug 11, 2025** Reported **Aug 26, 2025**
Analyses executed **GA-FPC**

CANx - Cannabinoids

Analyzed **Aug 05, 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	Limit
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	<LOQ	<LOQ	
Cannabigerol Acid (CBGA)	0.033	0.16	0.37	3.66	
Cannabigerol (CBG)	0.048	0.16	0.06	0.60	
Cannabidiol (CBD)	0.069	0.229	12.65	126.49	
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	2.84	28.40	
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	ND	ND	
Δ8-tetrahydrocannabinol (Δ8-THC)	0.044	0.16	ND	ND	
(6aR,9S)-Δ10-Tetrahydrocannabinol ((6aR,9S)-Δ10)	0.015	0.8	ND	ND	
Hexahydrocannabinol (S Isomer) (9s-HHC)	0.017	0.8	ND	ND	
(6aR,9R)-Δ10-Tetrahydrocannabinol ((6aR,9R)-Δ10)	0.007	0.8	ND	ND	
Hexahydrocannabinol (R Isomer) (9r-HHC)	0.016	0.8	ND	ND	
Tetrahydrocannabinolic Acid (THCA)	0.117	0.389	ND	ND	
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	17.83	178.32	
Δ8-Tetrahydrocannabiphorol (Δ8-THCP)	0.041	0.8	0.28	2.85	
Cannabicitran (CBT)	0.005	0.16	0.13	1.30	
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)	0.037	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)			ND	ND	
Total THC + Δ8THC + Δ10THC (THCa * 0.877 + Δ9THC + Δ8THC + Δ10THC)			ND	ND	
Total CBD (CBDa * 0.877 + CBD)			12.65	126.49	
Total CBG (CBGa * 0.877 + CBG)			0.38	3.81	
Total HHC (9r-HHC + 9s-HHC)			ND	ND	
Total Cannabinoids Analyzed			34.12	341.17	

*Dry Weight %

HME - Heavy Metals

Analyzed **Aug 19, 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	0.03	0.2
Cadmium (Cd)	0.0005	0.0015	0.00	0.2
Mercury (Hg)	0.0058	0.0174	ND	0.2
Lead (Pb)	0.0006	0.0018	0.01	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

DCC license: C8-0000098-LIC
DEA license: RP0611043
ISO/IEC 17025:2017 Acc. 85368

Scan the QR code to verify authenticity.

Authorized Signature

Brandon Starr, Quality Assurance Manager
Tue, 26 Aug 2025 11:55:33 -0700

PharmWare LABORATORY LIMS & ELN

MIBIG - Microbial

Analyzed **Aug 18, 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 **Aug 15, 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 **Aug 25, 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	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	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	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 **Aug 20, 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	68.8	N/A	Butane (But)	0.02	0.4	ND	800
Methanol (Metha)	1.176	3.92	944.9	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	ND	5000
Ethyl Ether (EthEt)	0.036	0.4	ND	N/A	Acetone (Acet)	0.044	0.4	64.5	N/A
Isopropanol (2-Pro)	1.16	3.868	41.9	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 **Aug 12, 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 **Aug 06, 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	7.3 % Mw	% Mw	Water Activity (WA)	0.03	0.03	0.52 a_w	a_w

MICx - Microbial X

Analyzed **Aug 18, 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
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