

PharmLabs San Diego Certificate of Analysis



Sample ASTRO8 - GRAVITY GRAM - 1G - DISPO - SOLAR FLARE

Delta9 THC	0.19%	THCa	ND	Total THC (THCa * 0.877 + THC)	0.19%	Delta8 THC	50.38%
------------	-------	------	----	--------------------------------	-------	------------	--------

Sample ID	SD250619-052 (116635)	Matrix	Concentrate
Tested for	A8 Industries		
Sampled	-	Received	Jun 18, 2025
Analyses executed	CANX, RES, MIBIG, MICX, MTO, PES, HME, FVI, D9C	Reported	Jul 01, 2025
		Unit Mass (g)	1.0

Summary D9C: The total Δ9-THC content in this sample is 0.19%. For the most accurate Δ9-THC concentration, refer to the GC MS/MS section of this COA. This sample was tested using HPLC and GC MS/MS. HPLC analysis can yield inconsistent results for Δ8-THC and Δ9-THC due to isomer interference: GC MS/MS was employed to avoid this issue. Please note, if THCa is present, the Δ9-THC level measured by GC MS/MS might be higher due to decarboxylation.

D9C - D9 Confirmation

Analyzed Jun 30, 2025 | Instrument GC MS/MS | Method SOP-041 D9C
The expanded Uncertainty of the D9 Confirmation analysis is approximately ±7.806% at the 95% Confidence Level

Analyte	LOD ppb	LOQ ppb	Result %	Result mg/g	Result mg/Unit
Δ9-Tetrahydrocannabinol (Δ9-THC)	1.462	4.432	0.19	1.89	1.89
Total Cannabinoids Analyzed	-	-	0.19	1.89	1.89

CANx - Cannabinoids

Analyzed Jun 20, 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	0.35	3.49	3.49
Cannabigerol Acid (CBGA)	0.033	0.16	ND	ND	ND
Cannabigerol (CBG)	0.048	0.16	ND	ND	ND
Cannabidiol (CBD)	0.069	0.229	0.07	0.73	0.73
1(S)-Tetrahydrocannabidiol (1(S)-H4-CBD)	0.008	0.026	0.20	2.05	2.05
1(R)-Tetrahydrocannabidiol (1(R)-H4-CBD)	0.016	0.049	0.39	3.86	3.86
Tetrahydrocannabivarin (THCV)	0.049	0.162	ND	ND	ND
Δ8-tetrahydrocannabivarin (Δ8-THCV)	0.012	0.036	0.47	4.66	4.66
Cannabidihexol (CBDH)	0.014	0.042	ND	ND	ND
Tetrahydrocannabutol (Δ9-THCB)	0.01	0.029	10.26	102.64	102.64
Cannabinol (CBN)	0.047	0.16	0.33	3.34	3.34
Cannabidiophorol (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	D9C	D9C	D9C
Δ8-tetrahydrocannabinol (Δ8-THC)	0.044	0.16	50.38	503.81	503.81
(6aR,9S)-Δ10-Tetrahydrocannabinol ((6aR,9S)-Δ10)	0.015	0.8	ND	ND	ND
Hexahydrocannabinol (S Isomer) (9s-HHC)	0.017	0.8	ND	ND	ND
(6aR,9R)-Δ10-Tetrahydrocannabinol ((6aR,9R)-Δ10)	0.007	0.8	ND	ND	ND
Hexahydrocannabinol (R Isomer) (9r-HHC)	0.016	0.8	ND	ND	ND
Tetrahydrocannabinolic Acid (THCA)	0.117	0.389	ND	ND	ND
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-Tetrahydrocannabiphorol (Δ9-THCP)	0.017	0.8	13.39	133.88	133.88
Δ8-Tetrahydrocannabiphorol (Δ8-THCP)	0.041	0.8	0.17	1.70	1.70
Cannabicitran (CBT)	0.005	0.16	0.25	2.54	2.54
Δ8-THC-O-acetate (Δ8-THCO)	0.076	0.8	ND	ND	ND
9(S)-HHCP (s-HHCP)	0.013	0.041	2.88	28.81	28.81
Δ9-THC-O-acetate (Δ9-THCO)	0.066	0.8	ND	ND	ND
9(R)-HHCP (r-HHCP)	0.015	0.045	8.39	83.91	83.91
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)			D9C	D9C	D9C
Total THC + Δ8THC + Δ10THC (THCa * 0.877 + Δ9THC + Δ8THC + Δ10THC)			50.38	503.81	503.81
Total CBD (CBDA * 0.877 + CBD)			0.38	3.79	3.79
Total CBG (CBGA * 0.877 + CBG)			ND	ND	ND
Total HHC (9r-HHC + 9s-HHC)			ND	ND	ND
Total Cannabinoids Analyzed			87.50	874.99	874.99

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



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

Brandon Starr, Quality Assurance Manager
Tue, 01 Jul 2025 14:11:21 -0700

PharmLabs San Diego | 3421 Hancock St, Second Floor, San Diego, CA 92110 | 619.356.0898 | ISO/IEC 17025:2017 Acc. 85368



*This report shall not be reproduced except in full, without the written approval of the lab. This report is for informational purposes only and should not be used to diagnose, treat or prevent any disease. Results are only for samples and batches indicated. Results are reported on an "as received" basis, unless indicated otherwise. When a Pass/Fail status is reported, that status is intended to be in accordance with federal, state and local laws which are required for the customer to be in compliance. The measurement of uncertainty is not included in the Pass/Fail evaluation unless explicitly required by federal, state or local laws and has been reported on the certificate of analysis. Measurement of uncertainty is available upon request.

HME - Heavy Metals

Analyzed Jun 24, 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	ND	0.2
Cadmium (Cd)	0.0005	0.0015	ND	0.2
Mercury (Hg)	0.0058	0.0174	ND	0.2
Lead (Pb)	0.0006	0.0018	ND	0.2

MIBIG - Microbial

Analyzed Jun 24, 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 Jun 24, 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



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

Brandon Starr, Quality Assurance Manager
Tue, 01 Jul 2025 14:11:21 -0700

PharmLabs San Diego | 3421 Hancock St, Second Floor, San Diego, CA 92110 | 619.356.0898 | ISO/IEC 17025:2017 Acc. 85368



*This report shall not be reproduced except in full, without the written approval of the lab. This report is for informational purposes only and should not be used to diagnose, treat or prevent any disease. Results are only for samples and batches indicated. Results are reported on an "as received" basis, unless indicated otherwise. When a Pass/Fail status is reported, that status is intended to be in accordance with federal, state and local laws which are required for the customer to be in compliance. The measurement of uncertainty is not included in the Pass/Fail evaluation unless explicitly required by federal, state or local laws and has been reported on the certificate of analysis. Measurement of uncertainty is available upon request.

PES - Pesticides

Analyzed Jun 24, 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	Paclabutrazol	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	Etoazole	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	0.059	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
Spir tetramat	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 Jun 23, 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	65.5	N/A	Butane (But)	0.02	0.4	55.1	800
Methanol (Metha)	1.176	3.92	<LOQ	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	<LOQ	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 Jun 19, 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

MICx - Microbial X

Analyzed Jun 24, 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



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

Brandon Starr, Quality Assurance Manager
Tue, 01 Jul 2025 14:11:21 -0700

PharmLabs San Diego | 3421 Hancock St, Second Floor, San Diego, CA 92110 | 619.356.0898 | ISO/IEC 17025:2017 Acc. 85368



*This report shall not be reproduced except in full, without the written approval of the lab. This report is for informational purposes only and should not be used to diagnose, treat or prevent any disease. Results are only for samples and batches indicated. Results are reported on an "as received" basis, unless indicated otherwise. When a Pass/Fail status is reported, that status is intended to be in accordance with federal, state and local laws which are required for the customer to be in compliance. The measurement of uncertainty is not included in the Pass/Fail evaluation unless explicitly required by federal, state or local laws and has been reported on the certificate of analysis. Measurement of uncertainty is available upon request.