

PharmLabs San Diego Certificate of Analysis



Sample **FM - Royal Runtz**

Delta9 THC	0.20%	THCa	0.04%	Total THC (THCa * 0.877 + THC)	0.23%	Delta8 THC	1.24%
------------	-------	------	-------	--------------------------------	-------	------------	-------

Sample ID	SD250815-071 (121332)	Matrix	Flower
Tested for	Vitapro		
Sampled	-	Received	Aug 15, 2025
Analyses executed	GA-FPC	Reported	Aug 28, 2025

CANx - Cannabinoids

Analyzed Aug 08, 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	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	0.03	0.33		
Cannabigerol Acid (CBGA)	0.033	0.16	6.32	63.23		
Cannabigerol (CBG)	0.048	0.16	0.40	3.98		
Cannabidiol (CBD)	0.069	0.229	<LOQ	<LOQ		
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	<LOQ	<LOQ		
Cannabidiphoral (CBDP)	0.016	0.049	ND	ND		
exo-THC (exo-THC)	0.016	0.8	ND	ND		
Tetrahydrocannabinol (Δ9-THC)	0.092	0.307	0.20	1.99		
Δ8-tetrahydrocannabinol (Δ8-THC)	0.044	0.16	1.24	12.36		
(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	0.04	0.38		
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-Tetrahydrocannabiphoral (Δ9-THCP)	0.017	0.8	4.28	42.83		
Δ8-Tetrahydrocannabiphoral (Δ8-THCP)	0.041	0.8	1.28	12.84		
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)	0.037	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)			0.23	2.32		
Total THC + Δ8THC + Δ10THC (THCa * 0.877 + Δ9THC + Δ8THC + Δ10THC)			1.47	14.68		
Total CBD (CBDA * 0.877 + CBD)			0.03	0.29		
Total CBG (CBGa * 0.877 + CBG)			5.94	59.43		
Total HHC (9r-HHC + 9s-HHC)			ND	ND		
Total Cannabinoids Analyzed			13.01	130.08		

*Dry Weight %

HME - Heavy Metals

Analyzed Aug 26, 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	0.12	0.2
Cadmium (Cd)	0.0005	0.0015	0.04	0.2
Mercury (Hg)	0.0058	0.0174	0.00	0.2
Lead (Pb)	0.0006	0.0018	0.09	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



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
Thu, 28 Aug 2025 07:48:40 -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.

MIBIG - Microbial

Analyzed Aug 19, 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	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 Aug 19, 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
Thu, 28 Aug 2025 07:48:40 -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 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
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 Aug 26, 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	76.5	N/A	Butane (But)	0.02	0.4	ND	800
Methanol (Metha)	1.176	3.92	2565.2	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	185.9	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	50.7	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 15, 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 08, 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	8.7 % Mw	% Mw	Water Activity (WA)	0.03	0.03	0.60 a _w	a _w

MICx - Microbial X

Analyzed Aug 25, 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	2	10000
Listeria (LIS)	1.0	1.0	ND	N/A
Gram Negative Bacteria (BTGN)	1.0	1.0	54	1000
Total Viable Aerobic Bacteria (TVAB)	1.0	1.0	1000	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
Thu, 28 Aug 2025 07:48:40 -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.