PharmLabs San Diego Certificate of Analysis

SD PharmLabs

Sample **Gummies - Titan Pineapple Express 1000mg**

Delta9 THC **0.05%**	THCa **ND**	Total THC (THCa * 0.877 + THC) **0.34%**	Delta8 THC **29.14%**

Sample ID SD250230-048 (108272)	Matrix Edible	Batch ID/Lot ID 143432
Tested for Viva la hemp		
Sampled -	Received Mar 2, 2025	Reported Mar 09, 2025
Analyses executed CANX, D9C		Unit Mass (g) 1.04

Summary D9C: The total Δ9-THC content in this sample is 0.18%. 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 Mar 25, 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	0.18	1.78	17.41
Total Cannabinoids Analyzed	-	-	0.18	1.78	17.41

CANx - Cannabinoids

Analyzed Mar 21, 2025 | Instrument HPLC-VWD | Method SOP-001
The expanded Uncertainty of the Cannabinoids analysis is approximately ±7.806% at the 95% Confidence Level

Analyte	LOD mg/g	LOQ mg/g	Result %	Result mg/g	Result mg/Unit	Sample photography
11-Hydroxy-Δ8-Tetrahydrocannabivarin (11-Hyd-Δ8-THCV)	0.013	0.041	ND	ND	ND	
Cannabidiorcin (CBDO)	0.006	0.02	ND	ND	ND	
Abnormal Cannabidiorcin (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	0.07	0.71	6.94	
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	ND	ND	ND	
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	0.09	0.88	8.61	
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	0.33	3.33	32.57	
Cannabidiphorol (CBDP)	0.016	0.049	ND	ND	ND	
exo-THC (exo-THC)	0.005	0.16	ND	ND	ND	
Tetrahydrocannabinol (Δ9-THC)	0.092	0.307	D9C	D9C	D9C	
Δ8-tetrahydrocannabinol (Δ8-THC)	0.044	0.16	19.26	192.62	1883.82	
(6aR,9S)-Δ10-Tetrahydrocannabinol ((6aR,9S)-Δ10)	0.015	0.8	ND	ND	ND	
Hexahydrocannabinol (S Isomer) (9s-HHC)	0.017	0.8	0.26	2.65	25.92	
(6aR,9R)-Δ10-Tetrahydrocannabinol ((6aR,9R)-Δ10)	0.007	0.8	ND	ND	ND	
Hexahydrocannabinol (R Isomer) (9r-HHC)	0.016	0.8	0.55	5.47	53.50	
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	0.07	0.74	7.24	
Δ8-Tetrahydrocannabiphorol (Δ8-THCP)	0.041	0.8	ND	ND	ND	
Cannabicitran (CBT)	0.005	0.16	0.05	0.52	5.09	
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)			D9C	D9C	D9C	
Total THC + Δ8THC + Δ10THC (THCa * 0.877 + Δ9THC + Δ8THC + Δ10THC)			8.89	88.9	889	
Total CBD (CBDa * 0.877 + CBD)			0.06	0.62	6.09	
Total CBG (CBGa * 0.877 + CBG)			ND	ND	ND	
Total HHC (9r-HHC + 9s-HHC)			0.81	8.12	79.41	
Total Cannabinoids Analyzed			9.67	96.7	967	

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

Authorized Signature

Brandon Stahl

Brandon Starr, Quality Assurance Manager
Wed, 05 Mar 2025 11:48:40 -0800

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LABORATORY LIMS & ELN

MIBIG - Microbial
Analyzed Feb 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	1
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 Feb 27, 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	-
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
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Brandon Starr

Brandon Starr, Quality Assurance Manager
Thu, 06 Mar 2025 15:39:46 -0800

PharmWare
LABORATORY LIMS & ELN

PES - Pesticides
Analyzed **Feb 26, 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		Carbofuran	0.01	0.02	ND	
Dimethoate	0.01	0.02	ND		Etofenprox	0.02	0.1	ND	
Fenoxycarb	0.01	0.02	ND		Thiachloprid	0.01	0.02	ND	
Daminozide	0.01	0.03	ND		Dichlorvos	0.02	0.07	ND	
Imazalil	0.02	0.07	ND		Methiocarb	0.01	0.02	ND	
Spiroxamine	0.01	0.02	ND		Coumaphos	0.01	0.02	ND	
Fipronil	0.01	0.1	ND		Paclobutrazol	0.01	0.03	ND	
Chlorpyrifos	0.01	0.04	ND		Ethoprophos (Prophos)	0.01	0.02	ND	
Baygon (Propoxur)	0.01	0.02	ND		Chlordane	0.04	0.1	ND	
Chlorfenapyr	0.03	0.1	ND		Methyl Parathion	0.02	0.1	ND	
Mevinphos	0.03	0.08	ND		Abamectin	0.03	0.08	ND	
Acephate	0.02	0.05	ND		Acetamiprid	0.01	0.05	ND	
Azoxystrobin	0.01	0.02	ND		Bifenazate	0.01	0.05	ND	
Bifenthrin	0.02	0.35	ND		Boscalid	0.01	0.03	ND	
Carbaryl	0.01	0.02	ND		Chlorantraniliprole	0.01	0.04	ND	
Clofentezine	0.01	0.03	ND		Diazinon	0.01	0.02	ND	
Dimethomorph	0.02	0.06	ND		Etoxazole	0.01	0.05	ND	
Fenpyroximate	0.02	0.1	ND		Flonicamid	0.01	0.02	ND	
Fludioxonil	0.01	0.05	ND		Hexythiazox	0.01	0.03	ND	
Imidacloprid	0.01	0.05	ND		Kresoxim-methyl	0.01	0.03	ND	
Malathion	0.01	0.05	ND		Metalaxyl	0.01	0.02	ND	
Methomyl	0.02	0.05	ND		Myclobutanil	0.02	0.07	ND	
Naled	0.01	0.02	ND		Oxamyl	0.01	0.02	ND	
Permethrin	0.01	0.02	ND		Phosmet	0.01	0.02	ND	
Piperonyl Butoxide	0.02	0.06	ND		Propiconazole	0.03	0.08	ND	
Prallethrin	0.02	0.05	ND		Pyrethrin	0.05	0.41	ND	
Pyridaben	0.02	0.07	ND		Spinosad A	0.01	0.05	ND	
Spinosad D	0.01	0.05	ND		Spiromesifen	0.02	0.06	ND	
Spirotetramat	0.01	0.02	ND		Tebuconazole	0.01	0.02	ND	
Thiamethoxam	0.01	0.02	ND		Trifloxystrobin	0.01	0.02	ND	
Acequinocyl	0.02	0.09	ND		Captan	0.01	0.02	ND	
Cypermethrin	0.02	0.1	ND		Cyfluthrin	0.04	0.1	ND	
Fenhexamid	0.02	0.07	ND		Spinetoram J,L	0.02	0.07	ND	
Pentachloronitrobenzene	0.01	0.1	ND						

RES - Residual Solvents
Analyzed **Feb 25, 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	ND	5000	Butane (But)	0.02	0.4	ND	5000
Methanol (Metha)	1.176	3.92	<LOQ	3000	Ethylene Oxide (EthOx)	0.08	0.4	ND	1
Pentane (Pen)	0.024	0.4	ND	5000	Ethanol (Ethan)	0.048	0.4	69.0	5000
Ethyl Ether (EthEt)	0.036	0.4	ND	5000	Acetone (Acet)	0.044	0.4	46.5	5000
Isopropanol (2-Pro)	1.16	3.868	<LOQ	5000	Acetonitrile (Acetonit)	0.888	2.952	<LOQ	410
Methylene Chloride (MetCh)	0.04	0.4	ND	1	Hexane (Hex)	0.012	0.4	49.3	290
Ethyl Acetate (EthAc)	0.032	0.4	146.6	5000	Chloroform (Clo)	0.028	0.4	ND	1
Benzene (Ben)	0.012	0.4	ND	1	1-2-Dichloroethane (12-Dich)	0.024	0.4	ND	1
Heptane (Hep)	0.012	0.4	ND	5000	Trichloroethylene (TriClEth)	0.072	0.4	ND	1
Toluene	0.036	0.4	ND	890	Xylenes (Xyl)	0.012	0.4	ND	2170

FVI - Filth & Foreign Material Inspection
Analyzed **Feb 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 **Feb 26, 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	11.3 % Mw	13 % Mw	Water Activity (WA)	0.03	0.03	0.67 a$_w$	0.85 a$_w$

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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Brandon Starr, Quality Assurance Manager
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