PharmLabs San Diego Certificate of Analysis

Sample **Cutleaf Duos Pop & Dab - Strawapple (Gummies)**

Delta9 THC **0.26%** | THCa **ND** | Total THC (THCa * 0.877 + THC) **0.26%** | Delta8 THC **ND**

Sample ID **SD250208-021 (106762)**	Matrix **Edible**	Batch ID/Lot ID **N06281- 25032A**	
Tested for **REEL World Brands**			
Sampled **-**	Received **Feb 07, 2025**	Reported **Mar 11, 2025**	
Analyses executed **MICX, FP-IO20**	Unit Mass (g) **141.796**	Num. of Servings **27**	Serving Size (g) **5.25**

CANx - Cannabinoids

Analyzed **Mar 03, 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/Serving	Result mg/Unit
11-Hydroxy-Δ8-Tetrahydrocannabivarin (11-Hyd-Δ8-THCV)	0.013	0.041	ND	ND	ND	ND
Cannabidiorcin (CBDO)	0.006	0.02	ND	ND	ND	ND
Abnormal Cannabidiorcin (a-CBDO)	0.013	0.038	ND	ND	ND	ND
(+/-)-9B-hydroxy-Hexahydrocannibinol (9b-HHC)	0.015	0.045	ND	ND	ND	ND
11-Hydroxy-Δ8-Tetrahydrocannabinol (11-Hyd-Δ8-THC)	0.015	0.045	ND	ND	ND	ND
Cannabidiolic Acid (CBDA)	0.033	0.16	ND	ND	ND	ND
Cannabigerol Acid (CBGA)	0.033	0.16	ND	ND	ND	ND
Cannabigerol (CBG)	0.048	0.16	ND	ND	ND	ND
Cannabidiol (CBD)	0.069	0.229	0.26	2.65	13.91	375.76
1(S)-Tetrahydrocannabidiol (1(S)-H4-CBD)	0.008	0.026	ND	ND	ND	ND
1(R)-Tetrahydrocannabidiol (1(R)-H4-CBD)	0.016	0.049	ND	ND	ND	ND
Tetrahydrocannabivarin (THCV)	0.049	0.162	ND	ND	ND	ND
Δ8-tetrahydrocannabivarin (Δ8-THCV)	0.012	0.036	ND	ND	ND	ND
Cannabidihexol (CBDH)	0.014	0.042	ND	ND	ND	ND
Tetrahydrocannabutol (Δ9-THCB)	0.01	0.029	ND	ND	ND	ND
Cannabinol (CBN)	0.047	0.16	ND	ND	ND	ND
Cannabidiphorol (CBDP)	0.016	0.049	ND	ND	ND	ND
exo-THC (exo-THC)	0.005	0.16	ND	ND	ND	ND
Tetrahydrocannabinol (Δ9-THC)	0.092	0.307	0.26	2.55	13.39	361.58
Δ8-tetrahydrocannabinol (Δ8-THC)	0.044	0.16	ND	ND	ND	ND
(6aR,9S)-Δ10-Tetrahydrocannabinol ((6aR,9S)-Δ10)	0.015	0.8	ND	ND	ND	ND
Hexahydrocannabinol (S Isomer) (9s-HHC)	0.017	0.8	ND	ND	ND	ND
(6aR,9R)-Δ10-Tetrahydrocannabinol ((6aR,9R)-Δ10)	0.007	0.8	ND	ND	ND	ND
Hexahydrocannabinol (R Isomer) (9r-HHC)	0.016	0.8	ND	ND	ND	ND
Tetrahydrocannabinolic Acid (THCA)	0.117	0.389	ND	ND	ND	ND
Δ9-Tetrahydrocannabihexol (Δ9-THCH)	0.02	0.061	ND	ND	ND	ND
Cannabinol Acetate (CBNO)	0.009	0.027	ND	ND	ND	ND
9(S)-Hexahydrocannabinolic Acid (9(S)-HHCa)	0.063	0.065	ND	ND	ND	ND
9(R)-Hexahydrocannabinolic Acid (9(R)-HHCa)	0.191	0.196	ND	ND	ND	ND
Δ9-Tetrahydrocannabiphorol (Δ9-THCP)	0.017	0.8	ND	ND	ND	ND
Δ8-Tetrahydrocannabiphorol (Δ8-THCP)	0.041	0.8	ND	ND	ND	ND
Cannabicitran (CBT)	0.005	0.16	ND	ND	ND	ND
Δ8-THC-O-acetate (Δ8-THCO)	0.076	0.8	ND	ND	ND	ND
9(S)-HHCP (s-HHCP)	0.013	0.041	ND	ND	ND	ND
Δ9-THC-O-acetate (Δ9-THCO)	0.066	0.8	ND	ND	ND	ND
9(R)-HHCP (r-HHCP)	0.015	0.045	ND	ND	ND	ND
9(S)-HHC-O-acetate (s-HHCO)	0.037	0.112	ND	ND	ND	ND
9(R)-HHC-O-acetate (r-HHCO)	0.031	0.093	ND	ND	ND	ND
3-octyl-Δ8-Tetrahydrocannabinol (Δ8-THC-C8)	0.021	0.062	ND	ND	ND	ND
Total THC (THCa * 0.877 + Δ9THC)			0.26	2.55	13.39	361.58
Total THC + Δ8THC + Δ10THC (THCa * 0.877 + Δ9THC + Δ8THC + Δ10THC)			0.26	2.55	13.39	361.58
Total CBD (CBDa * 0.877 + CBD)			0.26	2.65	13.91	375.76
Total CBG (CBGa * 0.877 + CBG)			ND	ND	ND	ND
Total HHC (9r-HHC + 9s-HHC)			ND	ND	ND	ND
Total Cannabinoids Analyzed			0.52	5.20	27.30	737.34

Sample photography

HME - Heavy Metals

Analyzed **Mar 07, 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	1.5
Cadmium (Cd)	0.0005	0.0015	ND	0.5
Mercury (Hg)	0.0058	0.0174	ND	3
Lead (Pb)	0.0006	0.0018	ND	0.5

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

Brandon Starr, Quality Assurance Manager
Tue, 11 Mar 2025 13:00:57 -0700

PharmWare LABORATORY LIMS & ELN

MIBIG - Microbial

Analyzed **Mar 03, 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 **Mar 04, 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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PES - Pesticides

Analyzed **Mar 04, 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 **Mar 11, 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	81.4	3000	Ethylene Oxide (EthOx)	0.08	0.4	ND	1
Pentane (Pen)	0.024	0.4	ND	5000	Ethanol (Ethan)	0.048	0.4	456.9	5000
Ethyl Ether (EthEt)	0.036	0.4	ND	5000	Acetone (Acet)	0.044	0.4	<LOQ	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	ND	290
Ethyl Acetate (EthAc)	0.032	0.4	<LOQ	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 **Mar 03, 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 **Mar 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	9.8 % Mw	13 % Mw	Water Activity (WA)	0.03	0.03	0.65 a_w	0.85 a_w

MICx - Microbial X

Analyzed **Mar 03, 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	
Listeria (LIS)	1.0	1.0	ND	
Gram Negative Bacteria (BTGN)	1.0	1.0	ND	
Total Viable Aerobic Bacteria (TVAB)	1.0	1.0	3	

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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