**SDPharmLabs** 

#### PharmLabs San Diego Certificate of Analysis

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Laboratory note: The estimated concentration of the unknown peak in the sample is 5.75% | Currently PharmLabs laboratory can not confirm an unidentified peak in your chromatogram due to interference (only with highly concentrated D8 products) from which we believe to be either (+)d8-THC or 49-THC. At this time there are no reference standards available for (+)d8-THC. (+)d8-THC is a different compound from the main (-)d8-THC cannabinoid and, therefore, these two compounds may have different efficacies. Using the most advanced instruments and techniques available, the separation of (+)d8-THC and d9-THC is problematic for the scientific community as a whole. PharmLabs believes the unidentified peak to be a combination of (+)d8-THC with the majority, if not all, of the concentration being (+)d8-THC. Total (+/-) D8 Concentration is estimated to be 4.95%.

#### **CANX - Cannabinoids Analysis**

Analyzed Apr 07, 2023 | Instrument HPLC-VWD | Method

The expanded Uncertainty of the Cannabinoid analysis is approximately **4.806**% at the 95% Confidence Level

Analyte	LOD	LOQ	Result	Result	Result
11-Hydroxy-Δ8-Tetrahydrocannabivarin (11-Hyd-Δ8-THCV)	mg/g 0.013	mg/g 0.041	% ND	mg/g ND	mg/Unit ND
Cannabidiorcin (CBDO)	0.002	0.007	ND	ND	ND
Abnormal Cannabidiorcin (a-CBDO)	0.002	0.007	ND	ND	ND
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(+/-)-9B-hydroxy-Hexahydrocannibinol (9b-HHC)	0.012	0.036	ND	ND	ND
11-Hydroxy-Δ8-Tetrahydrocannabinol (11-Hyd-Δ8-THC)	0.007	0.021	ND ND	ND ND	ND
Cannabidiolic Acid (CBDA)	0.001				ND
Cannabigerol Acid (CBGA)	0.001	0.16	ND	ND	ND
Cannabigerol (CBG)	0.001	0.16	ND	ND	ND
Cannabidiol (CBD)	0.001	0.16	ND	ND	ND
1(S)-THD (s-THD)	0.013	0.041	ND	ND	ND
1(R)-THD (r-THD)	0.025	0.075	ND	ND	ND
Tetrahydrocannabivarin (THCV)	0.001	0.16	ND	ND	ND
Δ8-tetrahydrocannabivarin (Δ8-THCV)	0.021	0.064	ND	ND	ND
Cannabidihexol (CBDH)	0.005	0.16	ND	ND	ND
Tetrahydrocannabutol (Δ9-THCB)	0.013	0.038	ND	ND	ND
Cannabinol (CBN)	0.001	0.16	0.85	8.47	25.41
Cannabidiphorol (CBDP)	0.015	0.047	ND	ND	ND
exo-THC (exo-THC)	0.005	0.16	ND	ND	ND
Tetrahydrocannabinol (Δ9-THC)	0.003	0.16	UI	UI	UI
Δ8-tetrahydrocannabinol (Δ8-THC)	0.004	0.16	43.97	439.70	1319.10
(6aR,9S)-Δ10-Tetrahydrocannabinol ((6aR,9S)-Δ10)	0.015	0.16	3.57	35.70	107.08
Hexahydrocannabinol (S Isomer) (9s-HHC)	0.017	0.16	ND	ND	ND
(6aR,9R)-Δ10-Tetrahydrocannabinol ((6aR,9R)-Δ10)	0.007	0.16	43.35	433.48	1300.43
Hexahydrocannabinol (R Isomer) (9r-HHC)	0.016	0.16	ND	ND	ND
Tetrahydrocannabinolic Acid (THCA)	0.001	0.16	ND	ND	ND
Δ9-Tetrahydrocannabihexol (Δ9-THCH)	0.024	0.071	ND	ND	ND
Cannabinol Acetate (CBNO)	0.014	0.043	ND	ND	ND
Δ9-Tetrahydrocannabiphorol (Δ9-THCP)	0.017	0.16	2.56	25.62	76.87
Δ8-Tetrahydrocannabiphorol (Δ8-THCP)	0.041	0.16	ND	ND	ND
Cannabicitran (CBT)	0.005	0.16	ND	ND	ND
Δ8-THC-O-acetate (Δ8-THCO)	0.076	0.16	ND	ND	ND
9(S)-HHCP (s-HHCP)	0.031	0.094	ND	ND	ND
Δ9-THC-O-acetate (Δ9-THCO)	0.066	0.16	ND	ND	ND
9(R)-HHCP (r-HHCP)	0.026	0.079	ND	ND	ND
9(S)-HHC-O-acetate (s-HHCO)	0.005	0.16	ND	ND	ND
3-octyl-Δ8-Tetrahydrocannabinol (Δ8-THC-C8)	0.067	0.204	ND	ND	ND
Δ9-THC methyl ether (Δ9-MeO-THC)			ND	ND	ND
Total THC ( THCa * 0.877 + $\Delta$ 9THC )			ND	ND	ND
Total THC + $\triangle$ 8THC + $\triangle$ 10THC ( THCa * 0.877 + $\triangle$ 9THC + $\triangle$ 8THC + $\triangle$ 10THC )			90.89	908.87	2726.61
Total CBD (CBDa * 0.877 + CBD)			ND	ND	ND
Total CBG ( CBGa * 0.877 + CBG )			ND	ND	ND
Total HHC (9r-HHC + 9s-HHC)			ND	ND	ND
Total Cannabinoids			94.30	942.96	2828.90



### HME - Heavy Metals Detection Analysis

Analyzed Apr 10, 2023 | Instrument ICP/MSMS | Method SOP-005

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
Arsenic (As)	0.0002	0.0005	0.00	0.2	Cadmium (Cd)	3.0e-05	0.0005	ND	0.2
Mercury (Hg)	1.0e-05	0.0001	ND	0.1	Lead (Pb)	1.0e-05	0.00125	ND	0.5











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Brandon Starr, Lab Manager



# MIBIG - Microbial Testing Analysis

Analyzed Apr 04, 2023 | Instrument qPCR and/or Plating | Method SOP-007

Analyte	Result CFU/g	Limit	Analyte	Result CFU/g	Limit
Shiga toxin-producing Escherichia Coli	ND	ND per 1 gram	Salmonella spp.	ND	ND per 1 gram
Aspergillus fumigatus	ND	ND per 1 gram	Aspergillus flavus	ND	ND per 1 gram
Asperaillus niger	ND	ND per 1 gram	Asperaillus terreus	ND	ND per 1 gram

# MTO - Mycotoxin Testing Analysis

Analyzed Apr 04, 2023 | Instrument LC/MSMS | Method SOP-004

Analyte	LOD ug/kg	LOQ ug/kg	Result ug/kg (ppb)	Limit ug/kg	Analyte	LOD ug/kg	LOQ ug/kg	Result ug/kg (ppb)	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 Not Identified
ND Not Detected
NA Not Applicable
NT Not Reported
LOD Limit of Detection
LOQ Limit of Quantification
<LOQ Detected
VULOL Above upper limit of linearity
CFU/g Colonyl Forming Units per 1 gram
TNTC Too Numerous to Count







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# PES - Pesticides Screening Analysis

Analyzed Apr 04, 2023 | 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	0.0078	0.02	ND	0.0078	Carbofuran	0.01	0.02	ND	0.01
Dimethoate	0.01	0.02	ND	0.01	Etofenprox	0.02	0.1	ND	0.02
Fenoxycarb	0.01	0.02	ND	0.01	Thiachloprid	0.01	0.02	ND	0.01
Daminozide	0.01	0.03	ND	0.01	Dichlorvos	0.02	0.07	ND	0.02
Imazalil	0.02	0.07	ND	0.02	Methiocarb	0.01	0.02	ND	0.01
Spiroxamine	0.01	0.02	ND	0.01	Coumaphos	0.01	0.02	ND	0.01
Fipronil	0.01	0.1	ND	0.01	Paclobutrazol	0.01	0.03	ND	0.01
Chlorpyrifos	0.01	0.04	ND	0.01	Ethoprophos (Prophos)	0.01	0.02	ND	0.01
Baygon (Propoxur)	0.01	0.02	ND	0.01	Chlordane	0.04	0.1	ND	0.04
Chlorfenapyr	0.03	0.1	ND	0.03	Methyl Parathion	0.02	0.1	ND	0.02
Mevinphos	0.03	0.08	ND	0.03	Abamectin	0.03	0.08	ND	0.1
Acephate	0.02	0.05	ND	0.1	Acetamiprid	0.01	0.05	ND	0.1
Azoxystrobin	0.01	0.02	ND	0.1	Bifenazate	0.01	0.05	ND	0.1
Bifenthrin	0.02	0.35	ND	3	Boscalid	0.01	0.03	ND	0.1
Carbaryl	0.01	0.02	ND	0.5	Chlorantraniliprole	0.01	0.04	ND	10
Clofentezine	0.01	0.03	ND	0.1	Diazinon	0.01	0.02	ND	0.1
Dimethomorph	0.02	0.06	ND	2	Etoxazole	0.01	0.05	ND	0.1
Fenpyroximate	0.02	0.1	ND	0.1	Flonicamid	0.01	0.02	ND	0.1
Fludioxonil	0.01	0.05	ND	0.1	Hexythiazox	0.01	0.03	ND	0.1
Imidacloprid	0.01	0.05	ND	5	Kresoxim-methyl	0.01	0.03	ND	0.1
Malathion	0.01	0.05	ND	0.5	Metalaxyl	0.01	0.02	ND	2
Methomyl	0.02	0.05	ND	1	Myclobutanil	0.02	0.07	ND	0.1
Naled	0.01	0.02	ND	0.1	Oxamyl	0.01	0.02	ND	0.5
Permethrin	0.01	0.02	ND	0.5	Phosmet	0.01	0.02	ND	0.1
Piperonyl Butoxide	0.02	0.06	ND	3	Propiconazole	0.03	0.08	ND	0.1
Prallethrin	0.02	0.05	ND	0.1	Pyrethrin	0.05	0.41	ND	0.5
Pyridaben	0.02	0.07	ND	0.1	Spinosad A	0.01	0.05	ND	0.1
Spinosad D	0.01	0.05	ND	0.1	Spiromesifen	0.02	0.06	ND	0.1
Spirotetramat	0.01	0.02	ND	0.1	Tebuconazole	0.01	0.02	ND	0.1
Thiamethoxam	0.01	0.02	ND	5	Trifloxystrobin	0.01	0.02	ND	0.1
Acequinocyl	0.02	0.09	ND	0.1	Captan	0.01	0.02	ND	0.7
Cypermethrin	0.02	0.1	ND	1	Cyfluthrin	0.04	0.1	ND	2
Fenhexamid	0.02	0.07	ND	0.1	Spinetoram J,L	0.02	0.07	ND	0.1
Pentachloronitrobenzene	0.01	0.1	ND	0.1					

# **RES - Residual Solvents Testing Analysis**

Analyzed Apr 05, 2023 | 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)	0.4	40.0	ND	5000.0	Butane (But)	0.4	40.0	ND	5000.0
Methanol (Metha)	0.4	40.0	ND	3000.0	Ethylene Oxide (EthOx)	0.4	0.8	ND	1.0
Pentane (Pen)	0.4	40.0	ND	5000.0	Ethanol (Ethan)	0.4	40.0	ND	5000.0
Ethyl Ether (EthEt)	0.4	40.0	ND	5000.0	Acetone (Acet)	0.4	40.0	ND	5000.0
Isopropanol (2-Pro)	0.4	40.0	ND	5000.0	Acetonitrile (Acetonit)	0.4	40.0	ND	410.0
Methylene Chloride (MetCh)	0.4	0.8	<loq< td=""><td>1.0</td><td>Hexane (Hex)</td><td>0.4</td><td>40.0</td><td>ND</td><td>290.0</td></loq<>	1.0	Hexane (Hex)	0.4	40.0	ND	290.0
Ethyl Acetate (EthAc)	0.4	40.0	ND	5000.0	Chloroform (Clo)	0.4	0.8	ND	1.0
Benzene (Ben)	0.4	0.8	ND	1.0	1-2-Dichloroethane (12-Dich)	0.4	0.8	ND	1.0
Heptane (Hep)	0.4	40.0	ND	5000.0	Trichloroethylene (TriClEth)	0.4	0.8	ND	1.0
Toluene (Toluene)	0.4	40.0	ND	890.0	Xulenes (Xul)	0.4	40.0	ND	2170.0

# FVI - Filth & Foreign Material Inspection Analysis

Analyzed Mar 31, 2023 | 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 3q	ND	> 1/4 of the total sample area covered by an imbedded foreign material	ND

UI Not Identified
ND Not Detected
NA Not Applicable
NT Not Reported
LOD Limit of Detection
LOQ Limit of Quantification
«LOQ Detected Culp Detected VULOL Above upper limit of linearity
CFU/g Colonyl Forming Units per 1 gram
TNTC Too Numerous to Count









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