

PharmLabs San Diego Certificate of Analysis

Sample ZOOTED THC-P - Northern Lights

Delta9 THC	ND	THCa	ND	Total THC (THCa + 0.877 + THC)	ND	Delta8 THC	0.16%
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Sample ID	SD241114-035 (102286)	Matrix	Concentrate
Tested for	LITTO		
Sampled	-	Received	Nov 13, 2024
Analyses executed	RES, MIBIG, MICK, MTO, PES, HME, FVI, D9C	Reported	Nov 18, 2024
		Unit Mass (g)	2.0

Summary D9C: The total Δ9-THC content in this sample is 0.00%. 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 Analysis

Analyzed Nov 18, 2024 | Instrument GC MS/MS | Method SOP-041 D9C
The expanded Uncertainty of the analysis is approximately ±7.806% at the 95% Confidence Level

Analyte	LOD mg/g	LOQ mg/g	Result %	Result mg/g	Result mg/Unit
Δ9-Tetrahydrocannabinol (Δ9-THC)	1.462	4.432	0.00	0.00	0.00

CANx - Cannabinoids Analysis

Analyzed Nov 05, 2024 | Instrument HPLC-VWD | Method SOP-001
The expanded Uncertainty of the Cannabinoid 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	
Cannabidiol (CBD)	0.002	0.007	ND	ND	ND	
Abnormal Cannabidiol (a-CBD)	0.01	0.031	ND	ND	ND	
(±)-9B-hydroxy-Hexahydrocannabinol (9b-HHC)	0.012	0.036	ND	ND	ND	
11-Hydroxy-Δ8-Tetrahydrocannabinol (11-Hyd-Δ8-THC)	0.007	0.021	ND	ND	ND	
Cannabidiolic Acid (CBDA)	0.001	0.16	0.34	3.39	6.78	
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)-Tetrahydrocannabinol (1(S)-H4-CBD)	0.013	0.041	ND	ND	ND	
1(R)-Tetrahydrocannabinol (1(R)-H4-CBD)	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	
Cannabidiol (CBDH)	0.005	0.16	ND	ND	ND	
Tetrahydrocannabutol (Δ9-THCB)	0.013	0.038	ND	ND	ND	
Cannabinol (CBN)	0.001	0.16	0.14	1.36	2.72	
Cannabidiol (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	D9C	D9C	D9C	
Δ8-tetrahydrocannabinol (Δ8-THC)	0.004	0.16	0.16	1.57	3.14	
(6aR,9S)-Δ10-Tetrahydrocannabinol ((6aR,9S)-Δ10)	0.126	0.42	ND	ND	ND	
Hexahydrocannabinol (S Isomer) (9s-HHC)	0.017	0.16	16.02	160.25	320.50	
(6aR,9R)-Δ10-Tetrahydrocannabinol ((6aR,9R)-Δ10)	0.118	0.39	ND	ND	ND	
Hexahydrocannabinol (R Isomer) (9r-HHC)	0.016	0.16	44.44	444.35	888.70	
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	11.02	110.25	220.50	
Δ8-Tetrahydrocannabiphorol (Δ8-THCP)	0.041	0.16	0.33	3.29	6.58	
Cannabicitran (CBT)	0.005	0.16	0.25	2.50	5.00	
Δ8-THC-O-acetate (Δ8-THCO)	0.076	0.16	9.83	98.32	196.64	
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	
9(R)-HHC-O-acetate (r-HHCO)	0.008	0.025	ND	ND	ND	
3-octyl-Δ8-Tetrahydrocannabinol (Δ8-THC-C8)	0.067	0.204	ND	ND	ND	
Total THC (THCa + 0.877 + Δ9THC)			ND	ND	ND	
Total THC + Δ8THC + Δ10THC (THCa + 0.877 + Δ9THC + Δ8THC + Δ10THC)			0.16	1.57	3.14	
Total CBD (CBDa + 0.877 + CBD)			0.30	2.97	5.95	
Total CBG (CBGa + 0.877 + CBG)			ND	ND	ND	
Total HHC (9r-HHC + 9s-HHC)			60.46	604.60	1209.20	
Total Cannabinoids Analyzed			82.49	824.86	1649.73	

HME - Heavy Metals Analysis

Analyzed Nov 14, 2024 | 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	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	0.00	0.5

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



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Authorized Signature

Brandon Starr

Brandon Starr, Quality Assurance Manager
Mon, 18 Nov 2024 15:44:08 -0800

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MIBIG - Microbial Analysis

Analyzed Nov 18, 2024 | Instrument qPCR and/or Plating | Method SOP-007

Analyte	LOD	LOQ	Result CFU/g	Limit	Analyte	LOD	LOQ	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
Aspergillus niger			ND	ND per 1 gram	Aspergillus terreus			ND	ND per 1 gram

MTO - Mycotoxin Analysis

Analyzed Nov 18, 2024 | 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 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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PES - Pesticides Analysis

Analyzed Nov 18, 2024 | 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	Carbofuran	0.01	0.02	ND	0
Dimethoate	0.01	0.02	ND	0	Etofenprox	0.02	0.1	ND	0
Fenoxycarb	0.01	0.02	ND	0	Thiachloprid	0.01	0.02	ND	0
Daminozide	0.01	0.03	ND	0	Dichlorvos	0.02	0.07	ND	0
Imazalil	0.02	0.07	ND	0	Methiocarb	0.01	0.02	ND	0
Spiroxamine	0.01	0.02	ND	0	Coumaphos	0.01	0.02	ND	0
Fipronil	0.01	0.1	ND	0	Paclobutrazol	0.01	0.03	ND	0
Chlorpyrifos	0.01	0.04	ND	0	Ethoprophos (Prophos)	0.01	0.02	ND	0
Baygon (Propoxur)	0.01	0.02	ND	0	Chlordane	0.04	0.1	ND	0
Chlorfenapyr	0.03	0.1	ND	0	Methyl Parathion	0.02	0.1	ND	0
Mevinphos	0.03	0.08	ND	0	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	Bifenazote	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	Chlorantranilprole	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	Metaxalyl	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
Spir tetramat	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 Analysis

Analyzed Nov 14, 2024 | 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)	1.16	3.868	ND	5000	Butane (But)	1.16	3.868	59.7	5000
Methanol (Metha)	1.16	3.868	<LOQ	3000	Ethylene Oxide (EthOx)	1.16	3.868	ND	1
Pentane (Pen)	1.16	3.868	ND	5000	Ethanol (Ethanol)	1.16	3.868	<LOQ	5000
Ethyl Ether (EthEt)	1.16	3.868	ND	5000	Acetone (Acet)	1.16	3.868	<LOQ	5000
Isopropanol (2-Pro)	1.16	3.868	42.6	5000	Acetonitrile (Acetonit)	1.16	3.868	<LOQ	410
Methylene Chloride (MetCh)	1.16	3.868	<LOQ	1	Hexane (Hex)	1.16	3.868	ND	290
Ethyl Acetate (EthAc)	1.16	3.868	ND	5000	Chloroform (Clo)	1.16	3.868	ND	1
Benzene (Ben)	1.16	3.868	ND	1	1-2-Dichloroethane (12-Dich)	1.16	3.868	ND	1
Heptane (Hep)	1.16	3.868	ND	5000	Trichloroethylene (TriClEth)	1.16	3.868	ND	1
Toluene (Toluene)	1.16	3.868	<LOQ	890	Xylenes (Xyl)	1.16	3.868	ND	2170

FVI - Filth & Foreign Material Inspection Analysis

Analyzed Nov 14, 2024 | 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 Analysis

Analyzed Nov 18, 2024 | Instrument Plating | Method SOP-007

Analyte	LOD CFU/G	LOQ CFU/G	Result CFU/G
Total Yeast & Molds (TYM)			ND
Listeria (LIS)			ND
Gram Negative Bacteria (BTGN)			ND
Total Viable Aerobic Bacteria (TVAB)			ND

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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