PharmLabs San Diego Certificate of Analysis

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Sample Malama MA1221

Sample ID SD211215	5-019 (45342)	Matrix Tincture (Other Cannabis Good)	
Tested for 1500 mg	g 1 fl oz 30 ML 33mg full specCBD 16n	ng full spec CBDA	
Sampled -	Received Dec 15, 2021	Reported Dec 28, 2021	

Analyses executed CAN+, RES, MIBNIG, MTO, PES, HME, FVI

Unit Volume (mL) 30.0 Density (g/mL) 1.083

CAN+ - Cannabinoids Analysis

Analyzed Dec 20, 2021 | Instrument HPLC-VWD | Method SOP-001 Measurement Uncertainty at 95% confidence 10.6%

Medsorement officertainty at 95% confider	10.070				
Analyte	LOD mg/g	LOQ mg/g	Result %	Result mg/mL	Result mg/Package
Cannabidivarin (CBDV)	0.002	0.161	0.04	0.36	10.75
Cannabidiolic Acid (CBDA)	0.001	0.16	1.60	14.73	441.86
Cannabigerol Acid (CBGA)	0.001	0.16	0.06	0.59	17.58
Cannabigerol (CBG)	0.001	0.16	0.29	2.63	78.98
Cannabidiol (CBD)	0.001	0.16	3.58	33.08	992.54
Tetrahydrocannabivarin (THCV)	0.001	0.16	ND	ND	ND
Cannabinol (CBN)	0.001	0.16	ND	ND	ND
Tetrahydrocannabinol (Δ9-THC)	0.003	0.16	0.18	1.66	49.71
Δ8-tetrahydrocannabinol (Δ8-THC)	0.004	0.16	ND	ND	ND
Cannabicyclol (CBL)	0.002	0.161	ND	ND	ND
Cannabichromene (CBC)	0.002	0.16	0.16	1.51	45.36
Tetrahydrocannabinolic Acid (THCA)	0.001	0.16	ND	ND	ND
Total THC (THCa * 0.877 + THC)			0.18	1.79	49.71
Total CBD (CBDa * 0.877 + CBD)			4.98	49.82	1380.05
Total CBG (CBGa * 0.877 + CBG)			0.34	3.41	94.40
TOTAL CANNABINOIDS			5.70	57.05	1580.27

Sample photography



HME - Heavy Metals Detection Analysis

Analyzed Dec 28, 2021 | 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	0.05	ND	1.5	Cadmium (Cd)	3.0e-05	0.05	<loq< td=""><td>0.5</td></loq<>	0.5
Mercury (Hg)	1.0e-05	0.01	<loq< td=""><td>3</td><td>Lead (Pb)</td><td>1.0e-05</td><td>0.125</td><td>ND</td><td>0.5</td></loq<>	3	Lead (Pb)	1.0e-05	0.125	ND	0.5

MIBNIG - Microbial Testing Analysis

Analyzed Dec 20, 2021 | Instrument Plating | Method SOP-007

Analyte	Result CFU/g	Limit	Analyte	Result CFU/g	Limit
Shiga toxin-producing Escherichia Coli	ND	ND per 1 gram	n Salmonella spp.	ND	ND per 1 gram

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



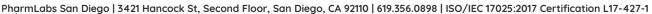






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MTO - Mycotoxin Testing Analysis

Analyzed Dec 28, 2021 | 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



COLLECTIVE

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









Scan the QR code to verify authenticity.

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aaron Stanak

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PES - Pesticides Screening Analysis

Analyzed Dec 28, 2021 | 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	0.3
Acephate	0.02	0.05	ND	5	Acetamiprid	0.01	0.05	ND	5
Azoxystrobin	0.01	0.02	ND	40	Bifenazate	0.01	0.05	ND	5
Bifenthrin	0.02	0.35	ND	0.5	Boscalid	0.01	0.03	ND	10
Carbaryl	0.01	0.02	ND	0.5	Chlorantraniliprole	0.01	0.04	ND	40
Clofentezine	0.01	0.03	ND	0.5	Diazinon	0.01	0.02	ND	0.2
Dimethomorph	0.02	0.06	ND	20	Etoxazole	0.01	0.05	ND	1.5
Fenpyroximate	0.02	0.1	ND	2	Flonicamid	0.01	0.02	ND	2
Fludioxonil	0.01	0.05	ND	30	Hexythiazox	0.01	0.03	ND	2
Imidacloprid	0.01	0.05	ND	3	Kresoxim-methyl	0.01	0.03	ND	1
Malathion	0.01	0.05	ND	5	Metalaxyl	0.01	0.02	ND	15
Methomyl	0.02	0.05	ND	0.1	Myclobutanil	0.02	0.07	ND	9
Naled	0.01	0.02	ND	0.5	Oxamyl	0.01	0.02	ND	0.2
Permethrin	0.01	0.02	ND	20	Phosmet	0.01	0.02	ND	0.2
Piperonyl Butoxide	0.02	0.06	ND	8	Propiconazole	0.03	0.08	ND	20
Prallethrin	0.02	0.05	ND	0.4	Pyrethrin	0.05	0.41	ND	1
Pyridaben	0.02	0.07	ND	3	Spinosad A	0.01	0.05	ND	3
Spinosad D	0.01	0.05	ND	3	Spiromesifen	0.02	0.06	ND	12
Spirotetramat	0.01	0.02	ND	13	Tebuconazole	0.01	0.02	ND	2
Thiamethoxam	0.01	0.02	ND	4.5	Trifloxystrobin	0.01	0.02	ND	30
Acequinocyl	0.02	0.09	ND	4	Captan	0.01	0.02	ND	5
Cypermethrin	0.02	0.1	ND	1	Cyfluthrin	0.04	0.1	ND	1
Fenhexamid	0.02	0.07	ND	10	Spinetoram J,L	0.02	0.07	ND	3
Pentachloronitrobenzene	0.01	0.1	ND	0.2					

COLLECTIVE

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
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TNTC Too Numerous to Count









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RES - Residual Solvents Testing Analysis

Analyzed Dec 22, 2021 | 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	<loq< td=""><td>5000</td><td>Butane (But)</td><td>0.4</td><td>40.0</td><td><loq< td=""><td>5000</td></loq<></td></loq<>	5000	Butane (But)	0.4	40.0	<loq< td=""><td>5000</td></loq<>	5000
Methanol (Metha)	0.4	40.0	<loq< td=""><td>3000</td><td>Ethylene Oxide (EthOx)</td><td>0.4</td><td>0.8</td><td>ND</td><td>1</td></loq<>	3000	Ethylene Oxide (EthOx)	0.4	0.8	ND	1
Pentane (Pen)	0.4	40.0	ND	5000	Ethanol (Ethan)	0.4	40.0	2163.6	5000
Ethyl Ether (EthEt)	0.4	40.0	ND	5000	Acetone (Acet)	0.4	40.0	ND	5000
Isopropanol (2-Pro)	0.4	40.0	ND	5000	Acetonitrile (Acetonit)	0.4	40.0	<loq< td=""><td>410</td></loq<>	410
Methylene Chloride (MetCh)	0.4	0.8	ND	1	Hexane (Hex)	0.4	40.0	ND	290
Ethyl Acetate (EthAc)	0.4	40.0	150.7	5000	Chloroform (Clo)	0.4	0.8	ND	1
Benzene (Ben)	0.4	0.8	ND	1	1-2-Dichloroethane (12-Dich)	0.4	0.8	ND	1
Heptane (Hep)	0.4	40.0	ND	5000	Trichloroethylene (TriClEth)	0.4	0.8	ND	1
Toluene (Toluene)	0.4	40.0	ND	890	Xylenes (Xyl)	0.4	40.0	ND	2170

FVI - Filth & Foreign Material Inspection Analysis

Analyzed Dec 15, 2021 | 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

COLLECTIVE

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
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