

PharmLabs San Diego Certificate of Analysis

3421 Hancock St, Second Floor, San Diego, CA 92110 | License: C8-000098-LIC
ISO/IEC 17025:2017 Certification L17-427-1 | Accreditation #85368

Sample **Extrax Lemon Haze - S**

Sample ID	SD220815-006 (51007)	Matrix	Flower (Inhalable Cannabis Good)
Tested for	Top Shelf Hemp Co		
Sampled	-	Received	Feb 26, 2023
		Reported	Mar 1, 2023
Analyses executed	FP-IO	Unit Mass (g)	3.5

Laboratory note: The estimated concentration of the unknown peak in the sample is 0.88%. 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 d9-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 and d9-THC with the majority, if not all, of the concentration being (+)d8-THC. Total cannabinoids is estimated to be 20.3%.

*CAN+ - Cannabinoids Analysis

Analyzed Feb 27, 2023 | Instrument HPLC-VWD | Method SOP-001

Measurement Uncertainty at 95% confidence 7.806%

Analyte	LOD mg/g	LOQ mg/g	Result %	Result mg/g	Result mg/Package
Cannabidivarin (CBDV)	0.039	0.16	ND	ND	ND
Cannabidiolic Acid (CBDA)	0.001	0.16	9.00	90.02	315.06
Cannabigerol Acid (CBGA)	0.001	0.16	0.26	2.64	9.26
Cannabigerol (CBG)	0.001	0.16	0.08	0.76	2.66
Cannabidiol (CBD)	0.001	0.16	1.42	14.22	49.76
Tetrahydrocannabivarin (THCV)	0.001	0.16	ND	ND	ND
Cannabinol (CBN)	0.001	0.16	ND	ND	ND
Tetrahydrocannabinol (Δ 9-THC)	0.003	0.16	UI	UI	UI
Δ 8-tetrahydrocannabinol (Δ 8-THC)	0.004	0.16	9.62	96.21	336.74
Cannabicyclol (CBL)	0.002	0.16	ND	ND	ND
Cannabichromene (CBC)	0.002	0.16	ND	ND	ND
Tetrahydrocannabinolic Acid (THCA)	0.001	0.16	0.21	2.09	7.31
Total THC (THCa * 0.877 + THC)			0.18	1.83	6.41
Total CBD (CBDa * 0.877 + CBD)			9.32	93.16	326.07
Total CBG (CBGa * 0.877 + CBG)			0.31	3.08	10.78
TOTAL CANNABINOIDS			19.43	194.29	680.00

*Dry Weight %

HME - Heavy Metals Detection Analysis

Analyzed Feb 27, 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	0.05	0.09	0.2	Cadmium (Cd)	3.0e-05	0.05	0.12	0.2
Mercury (Hg)	1.0e-05	0.01	0.02	0.1	Lead (Pb)	1.0e-05	0.125	0.32	0.5

UI Not Identified
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



Authorized Signature

Brandon Starr

Brandon Starr, Lab Manager
Wed, 1 Mar 2023 17:10:09 -0700

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MIBIG - Microbial Testing Analysis

Analyzed Feb 27, 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
Aspergillus niger	ND	ND per 1 gram	Aspergillus terreus	ND	ND per 1 gram

MTO - Mycotoxin Testing Analysis

Analyzed Feb 27, 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

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 LOD Limit of Detection
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PES - Pesticides Screening Analysis

Analyzed Feb 27, 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	Fonicamid	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					

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RES - Residual Solvents Testing Analysis

Analyzed Feb 27, 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	Butane (But)	0.4	40.0	ND	5000
Methanol (Metha)	0.4	40.0	ND	3000	Ethylene Oxide (EthOx)	0.4	0.8	ND	1
Pentane (Pen)	0.4	40.0	ND	5000	Ethanol (Ethan)	0.4	40.0	ND	5000
Ethyl Ether (EthEt)	0.4	40.0	ND	5000	Acetone (Acet)	0.4	40.0	72.9	5000
Isopropanol (2-Pro)	0.4	40.0	ND	5000	Acetonitrile (Acetonit)	0.4	40.0	ND	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	ND	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 Feb 27, 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 3g	ND	> 1/4 of the total sample area covered by an imbedded foreign material	ND

MWA - Moisture Content & Water Activity Analysis

Analyzed Feb 27, 2023 | Instrument Chilled-mirror Dewpoint and Capacitance | Method SOP-008

Analyte	Result	Limit	Analyte	Result	Limit
Moisture (Moi)	8.4 % Mw	13 % Mw	Water Activity (WA)	0.58 a _w	0.85 a _w

UI Not Identified
 ND Not Detected
 N/A Not Applicable
 NT Not Reported
 LOD Limit of Detection
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 >ULOL Above upper limit of linearity
 CFU/g Colony Forming Units per 1 gram
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