

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Organic CBD Tincture - Lemon
PRODUCT STRENGTH: 900mg
TINCTURE BATCH: 220712B
BEST BY DATE: 7/12/2024
HEMP EXTRACT LOT: BCA-00410-220624

Physical Attributes

Test	Method	Specification	Results
Color	Joy Internal	Golden to Amber	PASS
Odor	Joy Internal	Characteristic - Coconut and Hemp, Lemon	PASS
Appearance	Joy Internal	Golden to Amber oil in brown glass bottle with dropper.	PASS
Primary Package Eval.	Joy Internal	Container clean and free of filth. Container caps tight and shrink bands intact	PASS
Secondary Package Eval.	Joy Internal	Labeling Compliance Checked, Cartons sturdy and clean. Sufficient cushion material exists. Box taped and secure.	PASS

Review of Third-Party Analysis

Panel	Method	Specification	Results*	Pass/Fail
Potency - Total CBD	HPLC-UV DAD	*NLT (product strength) mg / bottle	33.44mg	PASS
Potency - D9-THC	HPLC-UV DAD	LOQ: <0.01% THC (Broad Spectrum)	ND	PASS
Expanded Pesticide Panel	HPLC-QQQ	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	ND	PASS
Microbial Escherichia coli (STEC)	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	Absent	PASS
Microbial Salmonella	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	Absent	PASS
Microbial Yeast and Mold	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 ² CFU/gram	Below LOQ	PASS
Microbial Total Coliforms*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 ² CFU/gram	Below LOQ	PASS
Microbial Total Aerobic Count*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 ³ CFU/gram	Below LOQ	PASS
Heavy Metals Panel	ICP-MS	Arsenic (As): ≤1.5 ppm Cadmium (Cd): ≤0.5 ppm Lead (Pb): ≤0.5 ppm Mercury (Hg): ≤1.5 ppm	ND	PASS
Mycotoxins	ICP-MS	Total Aflatoxins <20 ppb† Afltoxin B1 < 5 ppb Ochratoxin < 5ppb	ND	PASS
Residual Solvents	GC-HS-MSD	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	ND	PASS

*Level of Quantitation, † Parts Per Million ‡ Part Per Billion CFU/g=Colony Forming Units per Gram
 *Nothing Less Than
 10²=100 CFU
 10³=1,000 CFU

Quality Certified



7/28/22

Name

Date

900mg Lemon

Batch ID or Lot Number: 220712B	Test: Potency	Reported: 19Jul2022	USDA License: N/A
Matrix: Concentrate	Test ID: T000213971	Started: 15Jul2022	Sampler ID: N/A
	Method(s): TM14 (HPLC-DAD)	Received: 14Jul2022	Status: N/A

Cannabinoids

	LOD (%)	LOQ (%)	Result (%)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.006	0.017	ND	ND	
Cannabichromenic Acid (CBCA)	0.005	0.015	ND	ND	
Cannabidiol (CBD)	0.014	0.043	3.520	35.20	
Cannabidiolic Acid (CBDA)	0.014	0.045	ND	ND	
Cannabidivarin (CBDV)	0.003	0.010	0.020	0.20	
Cannabidivarinic Acid (CBDVA)	0.006	0.019	ND	ND	
Cannabigerol (CBG)	0.003	0.009	0.230	2.30	
Cannabigerolic Acid (CBGA)	0.013	0.039	ND	ND	
Cannabinol (CBN)	0.004	0.012	ND	ND	
Cannabinolic Acid (CBNA)	0.009	0.027	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.016	0.047	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.015	0.043	ND	ND	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.013	0.038	ND	ND	
Tetrahydrocannabivarin (THCV)	0.003	0.009	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.011	0.033	ND	ND	
Total Cannabinoids			3.770	37.70	
Total Potential THC			ND	ND	
Total Potential CBD			3.520	35.20	

Final Approval



Daniel Weidensaul
19Jul2022
03:39:00 PM MDT



Jacob Miller
19Jul2022
03:41:00 PM MDT



PREPARED BY / DATE

APPROVED BY / DATE

<https://results.botanacor.com/api/v1/coas/uuid/6e58d143-b750-4302-b2f7-1791489006fd>

Definitions
% = % (w/w) = Percent (weight of analyte / weight of product). ND = None Detected (defined by dynamic range of the method).
Total Potential Delta 9-THC or CBD is calculated to take into account the loss of a carboxyl group during decarboxylation step, using the following formulas: Total Potential Delta 9-THC = Delta 9-THC + (Delta 9-THCa *(0.877)) and Total CBD = CBD + (CBDA *(0.877)).

Testing results are based solely upon the sample submitted to Botanacor Laboratories, LLC, in the condition it was received. Botanacor Laboratories, LLC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of Botanacor Laboratories, LLC. ISO/IEC 17025:2017 Accredited by A2LA.



Cert #4329.02
6e58d143b7504302b2f71791489006fd.1

900mg Lemon

Batch ID or Lot Number: 220712B	Test: Microbial Contaminants	Reported: 19Jul2022	USDA License: NA
Matrix: Finished Product	Test ID: T000213972	Started: 15Jul2022	Sampler ID: NA
	Method(s): TM25 (PCR) TM24, TM26, TM27 (Culture Plating)	Received: 14Jul2022	Status: NA

Microbial Contaminants

Contaminants	Method	LOD	Quantitation Range	Result	Notes
STEC	TM25: PCR	10 ⁰ CFU/g	NA	Absent	Free from visual mold, mildew, and foreign matter
<i>Salmonella</i>	TM25: PCR	10 ⁰ CFU/g	NA	Absent	
Total Yeast and Mold*	TM24: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	
Total Aerobic Count*	TM26: Culture Plating	10 ² CFU/g	1.0x10 ³ - 1.5x10 ⁵	None Detected	
Total Coliforms*	TM27: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	

Final Approval



Brett Hudson
18Jul2022
05:21:00 PM MDT



Eden Thompson-Wright
19Jul2022
10:54:00 AM MDT



PREPARED BY / DATE

APPROVED BY / DATE

<https://results.botanacor.com/api/v1/coas/uuid/943b6345-30a1-4441-83d1-cda84711c18b>

Definitions

* Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form. Examples: 10² = 100 CFU, 10³ = 1,000 CFU, 10⁴ = 10,000 CFU, 10⁵ = 100,000 CFU
 CFU/g = Colony Forming Units per Gram, LOD = Limit of Detection
 ULOQ = Upper Limit of Quantitation, LLOQ = Lower Limit of Quantitation
 STEC = Shiga Toxin-Producing E. coli

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Cert #4329.02

943b634530a1444183d1cda84711c18b.1



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794



Report Number: 22-007617/D002.R000
Report Date: 07/07/2022
ORELAP#: OR100028
Purchase Order:
Received: 06/29/22 11:00

Solvents		Method: Residual Solvents by GC/MS				Units µg/g	Batch 2205605	Analyze 07/01/22 12:42 PM			
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
2-Methylbutane	< LOQ	1000	200	pass		2-Methylpentane	< LOQ	60.0	30.0	pass	
2-Propanol (IPA)	< LOQ	1000	200	pass		2,2-Dimethylbutane	< LOQ	60.0	30.0	pass	
2,2-Dimethylpropane	< LOQ	1000	200	pass		2,3-Dimethylbutane	< LOQ	60.0	30.0	pass	
3-Methylpentane	< LOQ	60.0	30.0	pass		Acetone	< LOQ	1000	200	pass	
Benzene	< LOQ	2.00	1.00	pass		Butanes (sum)	< LOQ	1000	400	pass	
Ethanol ¹	< LOQ	1000	200	pass		Ethyl acetate	< LOQ	1000	200	pass	
Hexanes (sum)	< LOQ	60.0	150	pass		m,p-Xylene	< LOQ	430	200	pass	
Methanol	< LOQ	600	200	pass		Methylpropane	< LOQ	1000	200	pass	
n-Butane	< LOQ	1000	200	pass		n-Heptane	< LOQ	1000	200	pass	
n-Hexane	< LOQ	60.0	30.0	pass		n-Pentane	< LOQ	1000	200	pass	
o-Xylene	< LOQ	430	200	pass		Pentanes (sum)	< LOQ	1000	600	pass	
Propane	< LOQ	1000	200	pass		Toluene	< LOQ	180	100	pass	
Total Xylenes	< LOQ	430	400	pass							



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Pesticides											
Method: AOAC 2007.01 & EN 15662 (mod)											
Units mg/kg Batch 2205582 Analyze 06/30/22 04:15 PM											
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin	< LOQ	0.25	0.070	pass		Acephate	< LOQ	0.050	0.020	pass	
Acequinocyl	< LOQ	0.030	0.025	pass		Acetamidrid	< LOQ	0.050	0.050	pass	
Aldicarb	< LOQ	0.50	0.100	pass		Allethrin	< LOQ	0.10	0.100	pass	
Atrazine	< LOQ	0.0250	0.025	pass		Azadirachtin	< LOQ	1.0	0.500	pass	
Azoxystrobin	< LOQ	0.010	0.010	pass		Benzovindiflupyr	< LOQ	0.010	0.010	pass	
Bifenazate	< LOQ	0.010	0.010	pass		Bifenthrin	< LOQ	1.0	0.100	pass	
Boscalid	< LOQ	0.010	0.010	pass		Buprofezin	< LOQ	0.020	0.010	pass	
Carbaryl	< LOQ	0.025	0.025	pass		Carbofuran	< LOQ	0.010	0.010	pass	
Chlorantraniliprole	< LOQ	0.020	0.010	pass		Chlorfenapyr	< LOQ	1.5	0.100	pass	
Chlorpyrifos	< LOQ	0.50	0.010	pass		Clofentezine	< LOQ	0.010	0.010	pass	
Clothianidin	< LOQ	0.025	0.025	pass		Coumaphos	< LOQ	0.010	0.010	pass	
Cyantraniliprole	< LOQ	0.010	0.010	pass		Cyfluthrin	< LOQ	0.20	0.200	pass	
Cyhalothrin,lambda	< LOQ	0.0200	0.250	pass		Cypermethrin	< LOQ	0.30	0.300	pass	
Cyprodinil	< LOQ	0.010	0.010	pass		Daminozide	< LOQ	0.10	0.050	pass	
Deltamethrin	< LOQ	0.50	0.500	pass		Diazinon	< LOQ	0.020	0.010	pass	
Dichlorvos	< LOQ	0.050	0.050	pass		Dimethoate	< LOQ	0.010	0.010	pass	
Dimethomorph	< LOQ	0.050	0.050	pass		Dinotefuran	< LOQ	0.050	0.050	pass	
Diuron	< LOQ	0.125	0.125	pass		Dodemorph	< LOQ	0.050	0.050	pass	
Endosulfan I (alpha)	< LOQ	2.5	0.050	pass		Endosulfan II (beta)	< LOQ	2.5	0.050	pass	
Endosulfan sulfate	< LOQ	2.5	0.050	pass		Ethoprophos	< LOQ	0.010	0.010	pass	
Etofenprox	< LOQ	0.050	0.010	pass		Etozazole	< LOQ	0.020	0.010	pass	
Etridiazole	< LOQ	0.15	0.050	pass		Fenhexamid	< LOQ	0.13	0.100	pass	
Fenoxycarb	< LOQ	0.010	0.010	pass		Fenpyroximate	< LOQ	0.020	0.020	pass	
Fensulfothion	< LOQ	0.010	0.010	pass		Fenthion	< LOQ	0.010	0.010	pass	
Fenvalerate	< LOQ		0.200			Fipronil	< LOQ	0.010	0.010	pass	
Flonicamid	< LOQ	0.025	0.025	pass		Fludioxonil	< LOQ	0.010	0.010	pass	
Fluopyram	< LOQ	0.010	0.010	pass		Hexythiazox	< LOQ	0.010	0.010	pass	
Imazalil	< LOQ	0.010	0.010	pass		Imidacloprid	< LOQ	0.010	0.010	pass	
Iprodione	< LOQ	0.50	0.500	pass		Kinoprene	< LOQ	1.3	0.200	pass	
Kresoxim-methyl	< LOQ	0.15	0.010	pass		Malathion	< LOQ	0.010	0.010	pass	
Metalaxyl	< LOQ	0.010	0.010	pass		Methiocarb	< LOQ	0.010	0.010	pass	
Methomyl	< LOQ	0.025	0.025	pass		Methoprene	< LOQ	2.0	1.00	pass	
Mevinphos	< LOQ	0.025	0.025	pass		MGK-264	< LOQ	0.050	0.050	pass	
Myclobutanil	< LOQ	0.010	0.010	pass		Naled	< LOQ	0.10	0.100	pass	
Novaluron	< LOQ	0.025	0.025	pass		Oxamyl	< LOQ	1.5	0.500	pass	
Paclbutrazole	< LOQ	0.010	0.010	pass		Parathion-Methyl	< LOQ	0.050	0.030	pass	
Permethrin	< LOQ	0.50	0.040	pass		Phenothrin	< LOQ	0.050	0.025	pass	
Phosmet	< LOQ	0.020	0.010	pass		Piperonyl butoxide	< LOQ	1.3	0.200	pass	
Pirimicarb	< LOQ	0.010	0.010	pass		Prallethrin	< LOQ	0.050	0.050	pass	
Propiconazole	< LOQ	0.10	0.010	pass		Propoxur	< LOQ	0.010	0.010	pass	
Pyraclostrobin	< LOQ	0.010	0.010	pass		Pyrethrins (total)	< LOQ	0.050	0.025	pass	
Pyridaben	< LOQ	0.020	0.020	pass		Pyriproxyfen	< LOQ	0.0100	0.010	pass	
Quintozene	< LOQ	0.020	0.020	pass		Resmethrin	< LOQ	0.050	0.020	pass	
Spinetoram	< LOQ	0.010	0.010	pass		Spinosad	< LOQ	0.010	0.010	pass	
Spirodiclofen	< LOQ	0.25	0.250	pass		Spiromesifen	< LOQ	3.0	0.030	pass	
Spirotetramat	< LOQ	0.010	0.010	pass		Spiroxamine	< LOQ	0.10	0.010	pass	



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Received: 06/29/22 11:00

Pesticides											
Method: AOAC 2007.01 & EN 15662 (mod)											
Units mg/kg Batch 2205582 Analyze 06/30/22 04:15 PM											
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Tebuconazole	< LOQ	0.010	0.010	pass		Tebufenozide	< LOQ	0.010	0.010	pass	
Teflubenzuron	< LOQ	0.025	0.025	pass		Tetrachlorvinphos	< LOQ	0.010	0.010	pass	
Tetramethrin	< LOQ	0.10	0.050	pass		Thiacloprid	< LOQ	0.010	0.010	pass	
Thiamethoxam	< LOQ	0.010	0.010	pass		Thiophanate-Methyl	< LOQ	0.050	0.030	pass	
Trifloxystrobin	< LOQ	0.010	0.010	pass							

Metals										
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Status	Notes	
Arsenic	< LOQ	1.50	mg/kg	0.0874	2205591	06/30/22	AOAC 2013.06 (mod.)	pass	X	
Cadmium	< LOQ	0.50	mg/kg	0.0874	2205591	06/30/22	AOAC 2013.06 (mod.)	pass	X	
Lead	< LOQ	0.50	mg/kg	0.0874	2205591	06/30/22	AOAC 2013.06 (mod.)	pass	X	
Mercury	< LOQ	1.50	mg/kg	0.0437	2205591	06/30/22	AOAC 2013.06 (mod.)	pass	X	

Mycotoxins										
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Status	Notes	
Aflatoxin B2†	< LOQ	5.00	µg/kg	5.00	2205724	07/07/22	AOAC 2007.01 & EN	pass		
Aflatoxin B1†	< LOQ	5.00	µg/kg	5.00	2205724	07/07/22	AOAC 2007.01 & EN	pass		
Aflatoxin G1†	< LOQ	5.00	µg/kg	5.00	2205724	07/07/22	AOAC 2007.01 & EN	pass		
Aflatoxin G2†	< LOQ	5.00	µg/kg	5.00	2205724	07/07/22	AOAC 2007.01 & EN	pass		
Ochratoxin A†	< LOQ	5.00	µg/kg	5.00	2205724	07/07/22	AOAC 2007.01 & EN	pass		
Ochratoxin B†	< LOQ		µg/kg	2.00	2205724	07/07/22	AOAC 2007.01 & EN			