

CannaBusiness Laboratories, LLC

2554 Palumbo Dr. Lexington, KY 40509

Certificate of Analysis

Customer:

Palmetto Synergistic Research

8856 Pee Dee Hwy

Conway, SC 29527

Collected Date:

Received Date: 11/10/2020 COA Released: 11/17/2020

Comments:

Sample ID: 201110006

Order Number: CB201110003

Sample Name: Hemp 25 Tincture

External Sample ID:

Batch Number: Lot 20312

Product Type: Edible

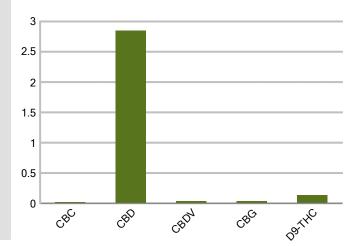
Sample Type: Edible

CANNABINOID PROFILE

Analyte	LOQ (%)	% weight	mg/ml
СВС	0.01	0.020	0.189
CBD	0.01	2.849	26.50
CBDa	0.01	ND	ND
CBDV	0.01	0.037	0.348
CBG	0.01	0.038	0.349
CBGa	0.01	ND	ND
CBN	0.01	ND	ND
d8-THC	0.01	ND	ND
d9-THC	0.01	0.140	1.299
THCa	0.01	ND	ND
Total Cannabi	noids	3.084	28.68
Total Potentia	I THC	0.140	1.299
Total Potentia	il CBD	2.849	26.50
Total Potentia	il CBG	0.038	0.349



Cannabinoids (% weight)



Ratio of Total Potential CBD to Total Potential THC 20.35:1

Ratio of Total Potential CBG to Total Potential THC 0.27:1

*Total Cannabinoids refers to the sum of all cannabinoids detected.

^{*}Total Potential THC/CBD are calculated to take into account the loss of an acid group during decarboxylation.



Authorized Signature

Jamie Hobgood

11/17/2020 9:16 AM

DATE

This product has been tested by CannaBusiness Laboratories using validated testing methodologies and a quality system. Values reported relate only to the product tested. CannaBusiness Laboratories using validated testing methodologies and a quality system. Values reported relate only to the product tested. Laboratories makes no claims as to the efficacy, safety, or other risks associated with any detected or non-detected levels of any compounds reported herein. This Certificate shall r reproduced except in full, without the written permission of CannaBusiness Laboratories. Uncertainty information is available on request. Photo is of sample received by the lab an vary from final packaging. The results apply to the sample as received. ISO/IEC 17025:2017 Accredited.

^{*}Total Potential CBD = (0.877 x CBDa) + CBD. *Total Potential THC = (0.877 x THCa) + THC. *Total Potential CBG = (0.877 x CBGa) + CBG.



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Sample Name: Hemp 25 Tincture

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Palmetto Synergistic Research 8856 Pee Dee Hwy Conway, SC 29527



Overall Batch Results PASS						
Pesticide	Moisture Content					
PASS	N/A					
Potency	Water Activity					
PASS	N/A					
Mycotoxins	Heavy Metals					
PASS	PASS					
Microbial Screen	Residual Solvents					
PASS	PASS					
Terpenoids N/A						

Sample Name: Hemp 25 Tincture

Sample ID: 201110006

Product Type: Edible Sample Type: Edible

Collected Date:

Received Date: 11/10/2020 Batch Number: Lot 20312

Batch Size: Sample Size:

COA released: 11/17/2020 9:16 AM

Potency	
Date Tested: 11/11/2020	Method:
Instrument:	

 0.140 %
 2.849 %
 3.084 %
 30.84 mg/g

 Total THC
 Total CBD
 Total Cannabinoids
 Total Cannabinoids

Analyte	Result	Units	LOQ	Result	Units
CBC (Cannabichromene)	0.020	%	0.010	0.189	mg/mL
CBD (Cannabidiol)	2.849	%	0.010	26.50	mg/mL
CBDa (Cannabidiolic Acid)	ND	%	0.010	ND	mg/mL
CBDV (Cannabidivarin)	0.037	%	0.010	0.348	mg/mL
CBG (Cannabigerol)	0.038	%	0.010	0.349	mg/mL
CBGa (Cannabigerolic Acid)	ND	%	0.010	ND	mg/mL
CBN (Cannabinol)	ND	%	0.010	ND	mg/mL
D8-THC (D8-Tetrahydrocannabinol)	ND	%	0.010	ND	mg/mL
D9-THC (D9-Tetrahydrocannabinol)	0.140	%	0.010	1.299	mg/mL
THCa (Tetrahydrocannabinolic Acid)	ND	%	0.010	ND	mg/mL

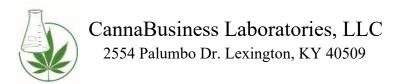
Pesticides			
Date Tested: 11/12/2020	Method:	Instrument:	

Analyte	Result Units	LOQ	Result	Analyte	Result Units	LOQ	Result
Acephate	ND ppm	0.010	Pass	Acetamiprid	ND ppm	0.010	Pass
Aldicarb	ND ppm	0.010	Pass	Azoxystrobin	ND ppm	0.010	Pass
Bifenazate	ND ppm	0.010	Pass	Bifenthrin	ND ppm	0.010	Pass
Boscalid	ND ppm	0.010	Pass	Carbaryl	ND ppm	0.010	Pass
Carbofuran	ND ppm	0.010	Pass	Chlorantraniliprole	ND ppm	0.010	Pass
Chlorpyrifos	ND ppm	0.010	Pass	Clofentezine	ND ppm	0.010	Pass
Coumaphos	ND ppm	0.010	Pass	Daminozide	ND ppm	0.010	Pass
Diazinon	ND ppm	0.010	Pass	Dichlorvos	ND ppm	0.010	Pass
Dimethoate	ND ppm	0.010	Pass	Etofenprox	ND ppm	0.010	Pass
Etoxazole	ND ppm	0.010	Pass	Fenhexamid	ND ppm	0.010	Pass
Fenoxycarb	ND ppm	0.010	Pass	Fenpyroximate	ND ppm	0.010	Pass
Fipronil	ND ppm	0.010	Pass	Flonicamid	ND ppm	0.010	Pass
Fludioxonil	ND ppm	0.010	Pass	Hexythiazox	ND ppm	0.010	Pass
Imazalil	ND ppm	0.010	Pass	Imidacloprid	ND ppm	0.010	Pass
Malathion	ND ppm	0.010	Pass	Metalaxyl	ND ppm	0.010	Pass
Methiocarb	ND ppm	0.010	Pass	Methomyl	ND ppm	0.010	Pass
Myclobutanil	ND ppm	0.010	Pass	Naled	ND ppm	0.010	Pass

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CannaBusiness Laboratories

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Sample Type: Edible

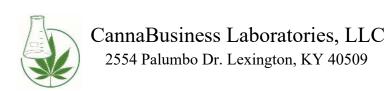
Certificate of Analysis

Analyte Result Units LOQ Result Analyte Result Units LOQ Result Operation	Pesticides								
Damy	Date Tested: 11/12/2020	Method:	Instrume	nt:					
Phosemet	Analyte	Result Units	LOQ	Result	Analyte	Result Ur	nits	LOQ	Result
Propincianzole N.D. ppm 0.010 Paiss Proposur N.D. ppm 0.010 Pais Propincial N.D. ppm 0.010 Paiss Spinotrariam N.D. ppm 0.010 Pais Thiologopid N.D. ppm 0.010 Pais Spinosyn A N.D. ppm 0.010	Oxamyl	ND ppm	0.010	Pass	Paclobutrazol	ND	ppm	0.010	Pass
Pyrethrin ND ppm	Phosmet	ND ppm	0.010	Pass	Prallethrin	ND	ppm	0.010	Pass
Prictable	Propiconazole	ND ppm	0.010	Pass	Propoxur	ND	ppm	0.010	Pass
Spromesifien	Pyrethrin I	ND ppm	0.010	Pass	Pyrethrin II	ND	ppm	0.010	Pass
Tabusconazole ND ppm	Pyridaben	ND ppm	0.010	Pass	Spinetoram	ND	ppm	0.010	Pas
Thiamethoxam	Spiromesifen	ND ppm	0.010	Pass	Spirotetramat	ND	ppm	0.010	Pas
Elhoprophos ND ppm	Tebuconazole	ND ppm	0.010	Pass	Thiacloprid	ND	ppm	0.010	Pas
Permethrins	Thiamethoxam	ND ppm	0.010	Pass	Trifloxystrobin	ND	ppm	0.010	Pas
Spinosyn A ND ppm 0.010 Pass Spinosyn D ND ppm 0.010 Pass Abamectinista ND ppm 0.010 Pass Spinosyn D ND ppm 0.010 Pass Abamectinista ND ppm 0.010 Pass Abamectinista ND ppm 0.010 Pass Analyte Result Units LOQ Result Result Units LOQ	Ethoprophos	ND ppm	0.010	Pass	Kresoxym-methyl	ND	ppm	0.010	Pas
AbamectinB1a	Permethrins	ND ppm	0.010	Pass	Piperonyl Butoxide	ND	ppm	0.010	Pas
	Spinosyn A	ND ppm	0.010	Pass	Spiroxamine-1	ND	ppm	0.010	Pas
Analyte Result Units LOQ Result Analyte Result An	AbamectinB1a	ND ppm	0.010	Pass	Spinosyn D	ND	ppm	0.010	Pas
Analyte Result Units LOQ Result Analyte Result Units LOQ Result	lycotoxins								
Ochratoxin A	Date Tested: 11/12/2020	Method:	Instrume	nt:					
Aflatoxin G2 ND ppm 0.010 Pass Aflatoxin B2 ND ppm 0.010 Pass Aflatoxin G1 ND ppm 0.010 Pass Aflatoxin G2 ND ppm 0.010 Pass Aflatoxin G1 ND ppm 0.010 Pass Aflatoxin B2 Pass Aflatoxin B2 ND ppm 0.010 Pass Aflatoxin B2 Pass Aflatoxin B2 ND ppm 0.010 Pass Aflatoxin B2 Pass Aflatoxin B2 ND ppm 0.010 Pass Aflatoxin B2 Pass Aflatoxin B2 ND ppm 0.010 Pass Aflatoxin B2 Pass Aflatoxin B2 ND ppm 0.010 Pass Aflatoxin B2 Pass Aflatoxin B2 ND ppm 0.010 Pass Aflatoxin B2 Pass Aflatoxin B2 ND ppm 0.010 Pas	Analyte	Result Units	LOQ	Result	Analyte	Result Ur	nits	LOQ	Result
Affatoxin G1	Ochratoxin A	ND ppm	0.010	Pass	Aflatoxin B1	ND	ppm	0.010	Pas
Method: Instrument: Instrument: Method: Instrument: Method: Instrument: Method: Instrument: Method: Instrument: Method:	Aflatoxin G2	ND ppm	0.010	Pass	Aflatoxin B2	ND	ppm	0.010	Pas
	Aflatoxin G1	ND ppm	0.010	Pass					
Analyte	Metals								
Arsenic	Date Tested: 11/12/2020	Method:	Instrume	nt:					
Lead	Analyte	Result Units	LOQ	Result	Analyte	Result Ur	nits	LOQ	Result
	Arsenic	<loq ppm<="" td=""><td>0.500</td><td>Pass</td><td>Cadmium</td><td><loq< td=""><td>ppm</td><td>0.500</td><td>Pass</td></loq<></td></loq>	0.500	Pass	Cadmium	<loq< td=""><td>ppm</td><td>0.500</td><td>Pass</td></loq<>	ppm	0.500	Pass
Analyte Result Units LOQ Result Analyte Result Units LOQ Result Result Units LOQ Result Result Units LOQ Result Analyte Result Units LOQ Result STEC (E. coli) Negative Pass L. monocytogenes Negative Pass L. monocytogenes Negative Pass L. monocytogenes Negative Pass Pas	Lead	<loq ppm<="" td=""><td>0.500</td><td>Pass</td><td>Mercury</td><td><loq< td=""><td>ppm</td><td>3.000</td><td>Pas</td></loq<></td></loq>	0.500	Pass	Mercury	<loq< td=""><td>ppm</td><td>3.000</td><td>Pas</td></loq<>	ppm	3.000	Pas
Result Units LOQ Result Analyte Result Units LOQ Result Result Units LOQ Result	/licrobial								
STEC (E. coli) Negative	Date Tested: 11/13/2020	Method:	Instrume	nt:					
Pass	Analyte	Result Units	LOQ	Result	Analyte	Result Ur	nits	LOQ	Result
Yeast/Mold	STEC (E. coli)	Negative		Pass	Salmonella	Negative			Pas
National	Listeria spp.	Negative		Pass	L. monocytogenes	Negative			Pas
Instrument:	Yeast/Mold	0 CFUs		Pass					
Analyte Result Units LOQ Result Analyte Result Units LOQ Result 1-4 Dioxane < LOQ	Residual Solvent								
1-4 Dioxane	Date Tested: 11/11/2020	Method:	Instrume	nt:					
2-Ethoxyethanol <loq ppm<="" td=""> 24 Pass 2-Methylpentane <loq ppm<="" td=""> 87 Pass 3-Methylpentane <loq ppm<="" td=""> 87 Pass 2-Propanol <loq ppm<="" td=""> 350 Pass Cyclohexane <loq ppm<="" td=""> 146 Pass Ether <loq ppm<="" td=""> 350 Pass Ethylbenzene <loq ppm<="" td=""> 81 Pass Acetone <loq ppm<="" td=""> 350 Pass Isopropyl Acetate <loq ppm<="" td=""> 175 Pass Methylbutane <loq ppm<="" td=""> 350 Pass n-Heptane <loq ppm<="" td=""> 350 Pass n-Hexane <loq ppm<="" td=""> 87 Pass n-Pentane <loq ppm<="" td=""> 350 Pass Tetrahydrofuran <loq ppm<="" td=""> 54 Pass Acetonitrile <loq ppm<="" td=""> 123 Pass Ethanol <loq ppm<="" td=""> 350 Pass Ethyl acetate <loq ppm<="" td=""> 175 Pass O-Xylene <loq ppm<="" td=""> 81 Pass m+p-Xylene <loq ppm<="" td=""> 163 Pass</loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq>	Analyte	Result Units	LOQ	Result	Analyte	Result Ur	nits	LOQ	Result
3-Methylpentane	1-4 Dioxane		29	Pass					Pas
Cyclohexane < LOQ ppm 146 Pass Ether < LOQ ppm 350 Pass Ethylbenzene < LOQ ppm	2-Ethoxyethanol	<loq ppm<="" td=""><td>24</td><td>Pass</td><td>2-Methylpentane</td><td><loq< td=""><td>ppm</td><td>87</td><td>Pas</td></loq<></td></loq>	24	Pass	2-Methylpentane	<loq< td=""><td>ppm</td><td>87</td><td>Pas</td></loq<>	ppm	87	Pas
Ethylbenzene <loq ppm<="" th=""> 81 Pass Acetone <loq ppm<="" th=""> 350 Pass Isopropyl Acetate <loq ppm<="" th=""> 175 Pass Methylbutane <loq ppm<="" th=""> 350 Pass n-Hexane <loq ppm<="" th=""> 350 Pass n-Hexane <loq ppm<="" th=""> 87 Pass n-Hexane <loq ppm<="" th=""> 87 Pass n-Hexane <loq ppm<="" th=""> 54 Pass n-Hexane <loq ppm<="" th=""> 350 <t< td=""><td>3-Methylpentane</td><td></td><td></td><td>Pass</td><td>2-Propanol</td><td><loq< td=""><td>ppm</td><td>350</td><td>Pas</td></loq<></td></t<></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq></loq>	3-Methylpentane			Pass	2-Propanol	<loq< td=""><td>ppm</td><td>350</td><td>Pas</td></loq<>	ppm	350	Pas
Sopropyl Acetate	Cyclohexane	<loq ppm<="" td=""><td>146</td><td>Pass</td><td>Ether</td><td><loq< td=""><td>ppm</td><td>350</td><td>Pas</td></loq<></td></loq>	146	Pass	Ether	<loq< td=""><td>ppm</td><td>350</td><td>Pas</td></loq<>	ppm	350	Pas
n-Heptane <loq ppm<="" th=""> 350 Pass n-Hexane <loq ppm<="" th=""> 87 Pass n-Hexane n-Pentane <loq ppm<="" td=""> 350 Pass Tetrahydrofuran <loq ppm<="" td=""> 54 Pass Acetonitrile Acetonitrile <loq ppm<="" td=""> 123 Pass Ethanol <loq ppm<="" td=""> 350 Pass Ethanol Ethyl acetate <loq ppm<="" td=""> 175 Pass o-Xylene <loq ppm<="" td=""> 81 Pass m+p-Xylene <loq ppm<="" td=""> 163 Pass Methanol <loq ppm<="" td=""> 250 Pass Pass m-Hexane</loq></loq></loq></loq></loq></loq></loq></loq></loq></loq>	Ethylbenzene	<loq ppm<="" td=""><td>81</td><td>Pass</td><td>Acetone</td><td><loq< td=""><td>ppm</td><td>350</td><td>Pas</td></loq<></td></loq>	81	Pass	Acetone	<loq< td=""><td>ppm</td><td>350</td><td>Pas</td></loq<>	ppm	350	Pas
n-Pentane <loq ppm<="" th=""> 350 Pass Tetrahydrofuran <loq ppm<="" th=""> 54 Pass Acetonitrile <loq ppm<="" td=""> 123 Pass Ethanol <loq ppm<="" td=""> 350 Pass Ethyl acetate <loq ppm<="" td=""> 175 Pass o-Xylene <loq ppm<="" td=""> 81 Pass m+p-Xylene <loq ppm<="" td=""> 163 Pass Methanol <loq ppm<="" td=""> 250 Pass</loq></loq></loq></loq></loq></loq></loq></loq>	Isopropyl Acetate	<loq ppm<="" td=""><td>175</td><td>Pass</td><td>Methylbutane</td><td><loq< td=""><td>ppm</td><td>350</td><td>Pas</td></loq<></td></loq>	175	Pass	Methylbutane	<loq< td=""><td>ppm</td><td>350</td><td>Pas</td></loq<>	ppm	350	Pas
Acetonitrile <loq ppm<="" th=""> 123 Pass Ethanol <loq ppm<="" th=""> 350 Pass Ethyl acetate <loq ppm<="" td=""> 175 Pass o-Xylene <loq ppm<="" td=""> 81 Pass m+p-Xylene <loq ppm<="" td=""> 163 Pass Methanol <loq ppm<="" td=""> 250 Pass</loq></loq></loq></loq></loq></loq>	n-Heptane		350	Pass	n-Hexane	<loq< td=""><td>ppm</td><td>87</td><td>Pas</td></loq<>	ppm	87	Pas
Acetonitrile <loq< th=""> ppm 123 Pass Ethanol <loq< th=""> ppm 350 Pass Ethyl acetate <loq< td=""> ppm 175 Pass o-Xylene <loq< td=""> ppm 81 Pass m+p-Xylene <loq< td=""> ppm 163 Pass Methanol <loq< td=""> ppm 250 Pass</loq<></loq<></loq<></loq<></loq<></loq<>	n-Pentane	<loq ppm<="" td=""><td>350</td><td>Pass</td><td>Tetrahydrofuran</td><td><loq< td=""><td>ppm</td><td>54</td><td>Pas</td></loq<></td></loq>	350	Pass	Tetrahydrofuran	<loq< td=""><td>ppm</td><td>54</td><td>Pas</td></loq<>	ppm	54	Pas
m+p-Xylene <loq 163="" 250="" <loq="" methanol="" pas<="" pass="" ppm="" td=""><td>Acetonitrile</td><td></td><td>123</td><td>Pass</td><td>Ethanol</td><td><loq< td=""><td>ppm</td><td>350</td><td>Pas</td></loq<></td></loq>	Acetonitrile		123	Pass	Ethanol	<loq< td=""><td>ppm</td><td>350</td><td>Pas</td></loq<>	ppm	350	Pas
m+p-Xylene <loq 163="" 250="" <loq="" methanol="" pas<="" pass="" ppm="" td=""><td>Ethyl acetate</td><td><loq ppm<="" td=""><td>175</td><td>Pass</td><td>o-Xylene</td><td></td><td></td><td>81</td><td>Pas</td></loq></td></loq>	Ethyl acetate	<loq ppm<="" td=""><td>175</td><td>Pass</td><td>o-Xylene</td><td></td><td></td><td>81</td><td>Pas</td></loq>	175	Pass	o-Xylene			81	Pas
		• •			•				Pas
				Pass					Pas

NT = Not tested, ND = Not detected; LOQ = Limit of Quantitation; <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

Jamie Hobgood HOBGOOD 11/17/2020 9:16 AM

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