

CERTIFICATE OF ANALYSIS

Prepared for:
CWB HOLDINGS, INC

700 Tech Ct.
Louisville, CO USA 80027

25mg Liquid Capsule Bulk

Batch ID or Lot Number: 220277 - Composite	Test: Potency	Reported: 26Sep2022	USDA License: N/A
Matrix: Concentrate	Test ID: T000221995	Started: 26Sep2022	Sampler ID: N/A
	Method(s): TM14 (HPLC-DAD): Potency - Broad Spectrum Analysis, 0.01% THC	Received: 23Sep2022	Status: Active

Cannabinoids

	LOD (%)	LOQ (%)	Result (%)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.006	0.020	0.176	1.76	Total THC is 1.18mg per capsule. Total THC is 35.44mg per 30 count container.
Cannabichromenic Acid (CBCA)	0.006	0.019	ND	ND	
Cannabidiol (CBD)	0.021	0.055	4.422	44.22	
Cannabidiolic Acid (CBDA)	0.021	0.056	0.063	0.63	Total THC is 70.88mg per 60 count container.
Cannabidivarin (CBDV)	0.005	0.013	0.037	0.37	
Cannabidivarinic Acid (CBDVA)	0.009	0.023	ND	ND	Total THC is 106.31mg per 90 count container.
Cannabigerol (CBG)	0.003	0.012	0.070	0.70	
Cannabigerolic Acid (CBGA)	0.014	0.048	ND	ND	
Cannabinol (CBN)	0.005	0.015	0.017	0.17	
Cannabinolic Acid (CBNA)	0.010	0.033	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.017	0.058	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.003	0.009	0.189	1.89	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.002	0.008	ND	ND	
Tetrahydrocannabivarin (THCV)	0.003	0.011	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.012	0.041	ND	ND	
Total Cannabinoids			4.974	49.74	
Total Potential THC			0.189	1.89	
Total Potential CBD			4.477	44.77	

Final Approval


Sam Smith
26Sep2022
04:46:00 PM MDT

PREPARED BY / DATE


Daniel Weidensaul
26Sep2022
04:48:00 PM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/735da251-1328-4e91-97ba-b9ad2f5e58e0>

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 SC Laboratories, Inc., in the condition it was received. SC Laboratories, Inc., 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 SC Laboratories, Inc. ISO/IEC 17025:2017 Accredited by A2LA.



Cert #4329.02

CDPHE Certified
735da25113284e9197bab9ad2f5e58e0.1



Sample Name:	220277		
Sample Description:	25 mg liquid capsule bulk		
Lab Name:	Charlotte's Web QC Lab, 700 Tech Ct., Louisville, CO 80027, Room 203	Sample Analyzed By:	Eric Webb
Customer:	Charlotte's Web	Test Method ID:	N/A
Contact:	Richard Wright, qateam@charlottesweb.com	Date Sample Received:	10-Oct-22
		Date Sample Analyzed:	10-Oct-22

Calculated Sample Entity Weight

Analysis

Result (g)

Entity Weight

0.750

This information is a portion of the complete report; contact the lab for more information. Results only apply to the received sample in the condition it was received. This certificate of analysis shall not be reproduced, except in full, without the prior written consent of CWB Holdings LLC.

Additions/Deviations/Exclusions/Comments:

N/A

Approvals

Role	Print Name	Signature	Date
Analyst	Eric Webb		10Oct22
Peer Reviewer	Leewaphath Xaiyasang		10Oct22

Certificate of Analysis

Charlotte's Web, Inc.

700 Tech Court
Louisville Colorado 80027 United States

Sample Name:	220277 - Composite	Eurofins Sample:	12189717
Project ID	CHARLO_WEB-20220919-0449	Receipt Date	21-Sep-2022
PO Number	QC 325	Receipt Condition	Ambient temperature
Description	25mg Liquid Capsule Bulk	Login Date	19-Sep-2022
		Date Started	22-Sep-2022
		Sampled	Sample results apply as received
		Number Compositated	20
		Online Order	16436-17EB53F3

Analysis	Result
Elements by ICP Mass Spectrometry	
Arsenic	<10.0 ppb
Cadmium	<5.00 ppb
Lead	<5.00 ppb
Mercury	<5.00 ppb
Glyphosate and AMPA	
Glyphosate	<100 ng/g
AMPA	<100 ng/g

Analysis	Limit	Result	Pass/Fail
Mycotoxins in Raw Materials			
Aflatoxin B1		<0.500 ppb	
Aflatoxin B2		<0.500 ppb	
Aflatoxin G1		<0.500 ppb	
Aflatoxin G2		<0.500 ppb	
Ochratoxin A	20 ppb	<1.00 ppb	Pass
Sum of B1 B2 G1 and G2	20 ppb	<2.00 ppb	Pass

BCC - Residual Solvent Analysis in Cannabis and Hemp Matrices

Category I Residual Solvent or Processing Chemical

Chemical	Limit	Result	Pass/Fail
1,2-Dichloroethane	1.0 ppm	<1.0 ppm	Pass
Benzene	1.0 ppm	<1.0 ppm	Pass
Chloroform	1.0 ppm	<1.0 ppm	Pass
Ethylene Oxide	25.0 ppm	<25.0 ppm	Pass
Methylene Chloride	1.0 ppm	<1.0 ppm	Pass
Trichloroethylene	1.0 ppm	<1.0 ppm	Pass

The BCC limit of 1 ppm for Ethylene Oxide is not achieved by this method. Reporting limit of 25 ppm is the limit recommended by the AOAC CASP.

Category II Residual Solvent or Processing Chemical

Chemical	Limit	Result	Pass/Fail
Isopropal Alcohol	5000 ppm	<500 ppm	Pass
Acetone	5000 ppm	<200 ppm	Pass

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Description	25mg Liquid Capsule Bulk	Login Date	19-Sep-2022
		Date Started	22-Sep-2022
		Sampled	Sample results apply as received
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		Online Order	16436-17EB53F3

Analysis	Limit	Result	Pass/Fail
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BCC - Residual Solvent Analysis in Cannabis and Hemp Matrices

Acetonitrile	410 ppm	<200 ppm	Pass
Ethanol	5000 ppm	<1000 ppm	Pass
Ethyl Acetate	5000 ppm	<500 ppm	Pass
Ethyl Ether	5000 ppm	<500 ppm	Pass
Methanol	3000 ppm	<500 ppm	Pass
Butane	5000 ppm	<500 ppm	Pass
Heptane	5000 ppm	<50.0 ppm	Pass
Hexane	290 ppm	<30.0 ppm	Pass
Pentane	5000 ppm	<25.0 ppm	Pass
Propane	5000 ppm	<1000 ppm	Pass
Toluene	890 ppm	<90.0 ppm	Pass
Xylenes (ortho-, meta-, para-)	2170 ppm	<160 ppm	Pass

The Pass/Fail reporting designations are relative to the limits set forth by the Bureau of Cannabis Control, Title 16, Division 42.

Multi-Residue Analysis for hemp products - BCC Pesticide List

Abamectin	0.3 mg/kg	<0.30 mg/kg	Pass
Acephate	5 mg/kg	<0.10 mg/kg	Pass
Acequinocyl	4 mg/kg	<1.0 mg/kg	Pass
Acetamiprid	5 mg/kg	<0.10 mg/kg	Pass
Aldicarb	0.1 mg/kg	<0.10 mg/kg	Pass
Aldicarb sulfone (Aldoxycarb)	0.1 mg/kg	<0.10 mg/kg	Pass
Aldicarb sulfoxide	0.1 mg/kg	<0.10 mg/kg	Pass
Azoxystrobin	40 mg/kg	<0.10 mg/kg	Pass
Bifenazate	5 mg/kg	<0.10 mg/kg	Pass
Bifenthrin	0.5 mg/kg	<0.10 mg/kg	Pass
Boscalid	10 mg/kg	<0.10 mg/kg	Pass
Captan	5 mg/kg	<0.20 mg/kg	Pass
Carbaryl	0.5 mg/kg	<0.10 mg/kg	Pass

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Description	25mg Liquid Capsule Bulk	Login Date	19-Sep-2022
		Date Started	22-Sep-2022
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Analysis	Limit	Result	Pass/Fail
Multi-Residue Analysis for hemp products - BCC Pesticide List			
Carbofuran	0.1 mg/kg	<0.10 mg/kg	Pass
Carbofuran-3-hydroxy-	0.1 mg/kg	<0.10 mg/kg	Pass
Chlorantraniliprole	40 mg/kg	<0.10 mg/kg	Pass
Chlordane, cis-	0.1 mg/kg	<0.10 mg/kg	Pass
Chlordane, trans-	0.1 mg/kg	<0.10 mg/kg	Pass
Chlorfenapyr	0.1 mg/kg	<0.10 mg/kg	Pass
Chlorpyrifos	0.1 mg/kg	<0.10 mg/kg	Pass
Clofentezine	0.5 mg/kg	<0.10 mg/kg	Pass
Coumaphos	0.1 mg/kg	<0.10 mg/kg	Pass
Cyfluthrin	1 mg/kg	<0.10 mg/kg	Pass
Cypermethrin	1 mg/kg	<0.10 mg/kg	Pass
Diazinon	0.2 mg/kg	<0.10 mg/kg	Pass
Dichlorvos	0.1 mg/kg	<0.10 mg/kg	Pass
Dimethoate	0.1 mg/kg	<0.10 mg/kg	Pass
Dimethomorph	20 mg/kg	<0.10 mg/kg	Pass
Ethoprophos	0.1 mg/kg	<0.10 mg/kg	Pass
Etofenprox	0.1 mg/kg	<0.10 mg/kg	Pass
Etoxazole	1.5 mg/kg	<0.10 mg/kg	Pass
Fenoxycarb	0.1 mg/kg	<0.10 mg/kg	Pass
Fenpyroximate	2 mg/kg	<0.10 mg/kg	Pass
Fipronil	0.1 mg/kg	<0.10 mg/kg	Pass
Fipronil desulfinyl	0.1 mg/kg	<0.10 mg/kg	Pass
Fipronil sulfone	0.1 mg/kg	<0.10 mg/kg	Pass
Fonicamid	2 mg/kg	<0.10 mg/kg	Pass
Fludioxonil	30 mg/kg	<0.10 mg/kg	Pass
Hexythiazox	2 mg/kg	<0.10 mg/kg	Pass
Imazalil	0.1 mg/kg	<0.10 mg/kg	Pass
Imidacloprid	3 mg/kg	<0.10 mg/kg	Pass
Kresoxim-methyl	1 mg/kg	<0.10 mg/kg	Pass

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Analysis	Limit	Result	Pass/Fail
Multi-Residue Analysis for hemp products - BCC Pesticide List			
Malathion	5 mg/kg	<0.10 mg/kg	Pass
Metalaxyl	15 mg/kg	<0.10 mg/kg	Pass
Methiocarb	0.1 mg/kg	<0.10 mg/kg	Pass
Methiocarb sulfone	0.1 mg/kg	<0.10 mg/kg	Pass
Methiocarb sulfoxide	0.1 mg/kg	<0.10 mg/kg	Pass
Methomyl	0.1 mg/kg	<0.10 mg/kg	Pass
Mevinphos	0.1 mg/kg	<0.10 mg/kg	Pass
Myclobutanil	9 mg/kg	<0.10 mg/kg	Pass
Naled	0.5 mg/kg	<0.10 mg/kg	Pass
Oxamyl	0.2 mg/kg	<0.10 mg/kg	Pass
Paclobutrazol	0.1 mg/kg	<0.10 mg/kg	Pass
Methyl parathion	0.1 mg/kg	<0.10 mg/kg	Pass
Pentachloroaniline	0.2 mg/kg	<0.10 mg/kg	Pass
Pentachlorobenzene	0.2 mg/kg	<0.10 mg/kg	Pass
Pentachlorobenzonitrile	0.2 mg/kg	<0.10 mg/kg	Pass
Pentachlorothioanisole	0.2 mg/kg	<0.10 mg/kg	Pass
Permethrin	20 mg/kg	<0.10 mg/kg	Pass
Phosmet	0.2 mg/kg	<0.10 mg/kg	Pass
Piperonylbutoxide	8 mg/kg	<0.10 mg/kg	Pass
Prallethrin	0.4 mg/kg	<0.10 mg/kg	Pass
Propiconazole (sum of isomers)	20 mg/kg	<0.10 mg/kg	Pass
Propoxur	0.1 mg/kg	<0.10 mg/kg	Pass
Pyrethrins	1 mg/kg	<1.0 mg/kg	Pass
Pyridaben	3 mg/kg	<0.10 mg/kg	Pass
Pentachloronitrobenzene	0.2 mg/kg	<0.10 mg/kg	Pass
Spinetoram	3 mg/kg	<0.10 mg/kg	Pass
Spinosad	3 mg/kg	<0.10 mg/kg	Pass
Spiromesifen	12 mg/kg	<0.10 mg/kg	Pass
Spirotetramat	13 mg/kg	<0.10 mg/kg	Pass

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Analysis	Limit	Result	Pass/Fail
Multi-Residue Analysis for hemp products - BCC Pesticide List			
Spiroxamine	0.1 mg/kg	<0.10 mg/kg	Pass
Tebuconazole	2 mg/kg	<0.10 mg/kg	Pass
Thiacloprid	0.1 mg/kg	<0.10 mg/kg	Pass
Thiamethoxam	4.5 mg/kg	<0.10 mg/kg	Pass
Trifloxystrobin	30 mg/kg	<0.10 mg/kg	Pass
The Pass/Fail reporting designations are relative to the limits set forth by the Bureau of Cannabis Control, Title 16, Division 42.			
Multi-Residue Analysis for hemp products - BCC Pesticides Fenhexamid and Daminoside			
Daminozide	0.1 mg/kg	<0.10 mg/kg	Pass
Fenhexamid	10 mg/kg	<0.10 mg/kg	Pass
The Pass/Fail reporting designations are relative to the limits set forth by the Bureau of Cannabis Control, Title 16, Division 42.			

Method References

Testing Location

BCC - Residual Solvent Analysis in Cannabis and Hemp Matrices (CANN_SOL_S)

Food Integrity Innovation-Madison

6304 Ronald Reagan Ave Madison, WI 53704 USA

Internally Developed Method

Elements by ICP Mass Spectrometry (ICP_MS_S)

Food Integrity Innovation-Madison

6304 Ronald Reagan Ave Madison, WI 53704 USA

Official Methods of Analysis, Method 2011.19, 993.14, and 2015.01, AOAC INTERNATIONAL (Modified).

Glyphosate and AMPA (GLY_AMP_A_S)

Food Integrity Innovation-Madison

6304 Ronald Reagan Ave Madison, WI 53704 USA

Monsanto Company Method ME-1466-02, "High Throughput Assay for Glyphosate and AMPA in Raw Agricultural Commodities and Processed Fractions Using LC/MS/MS".

Certificate of Analysis

Charlotte's Web, Inc.

700 Tech Court
Louisville Colorado 80027 United States

Method References

Testing Location

Multi-Residue Analysis for hemp products - BCC Pesticide List (PEST_HEMP)

Food Integrity Innovation-Madison

6304 Ronald Reagan Ave Madison, WI 53704 USA

Official Methods of Analysis, AOAC Official Method 2007.01, Pesticide Residues in Foods by Acetonitrile Extraction and Partitioning with Magnesium Sulfate, AOAC INTERNATIONAL (modified).

CEN Standard Method EN 15662: Food of plant origin - Determination of pesticide residues using GC-MS and/or LC-MS/MS following acetonitrile extraction/partitioning and clean-up by dispersive SPE - QuEChERS method.

List of the tested pesticides and their limits of quantification (LOQs) are available upon request.

Multi-Residue Analysis for hemp products - BCC Pesticides Fenhexamid and Daminoside (PEST_HEMP)

Food Integrity Innovation-Madison

6304 Ronald Reagan Ave Madison, WI 53704 USA

Official Methods of Analysis, AOAC Official Method 2007.01, Pesticide Residues in Foods by Acetonitrile Extraction and Partitioning with Magnesium Sulfate, AOAC INTERNATIONAL (modified).

CEN Standard Method EN 15662: Food of plant origin - Determination of pesticide residues using GC-MS and/or LC-MS/MS following acetonitrile extraction/partitioning and clean-up by dispersive SPE - QuEChERS method.

List of the tested pesticides and their limits of quantification (LOQs) are available upon request.

Mycotoxins in Raw Materials (MYCO_REG_S)

Food Integrity Innovation-Madison

6304 Ronald Reagan Ave Madison, WI 53704 USA

Varga, E., Glauner, T., Koppen, R., Mayer, K., Sulyok, M., Schumacher, R., Krska, R. and Berthiller, F., "Stable isotope dilution assay for the accurate determination of mycotoxins in maize by UHPLC-MS/MS," *Analytical and BioAnalytical Chemistry*, 402:2675-2686 (2012).

Testing Location(s)

Released on Behalf of Eurofins by

Food Integrity Innovation-Madison

Edward Ladwig - President Eurofins Food
Chemistry Testing Madison

Eurofins Food Chemistry Testing Madison, Inc.
6304 Ronald Reagan Ave
Madison WI 53704
800-675-8375



2918.01

Certificate of Analysis

Charlotte's Web, Inc.

700 Tech Court

Louisville Colorado 80027 United States

These results apply only to the items tested. This certificate of analysis shall not be reproduced, except in its entirety, without the written approval of Eurofins. Measurement uncertainty for individual analyses can be obtained upon request.

Eurofins Microbiology Laboratory (Colorado)

1371 Horizon Avenue
 Lafayette, Colorado 80026
 +1 720-758-6010
 Micro-Colorado@eurofinsUS.com

CW Hemp - 08
 Stephanie Fitzgerald
 700 Tech Ct
 Louisville, CO 80026

Client Code: EI0000162
PO#: QC 325

ANALYTICAL REPORT

AR-22-EI-022020-01

Received On: 14Sep2022
Reported On: 19Sep2022

Eurofins Sample Code: 397-2022-09140124	Sample Registration Date: 14Sep2022
Client Sample Code: 220277A - Composite	Condition Upon Receipt: acceptable, 20.4°C
Sample Description: 25mg Liquid Capsule 30ct	Sample Reference:

UMCP8 - Salmonella species - AOAC-RI 121501	Reference AOAC-RI 121501	Accreditation ISO/IEC 17025:2017 A2LA 3329.11	Completed 15Sep2022
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Parameter Salmonella	Result Not Detected per 25 ml
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UMI17 - Aerobic Plate Count - AOAC 966.23	Reference AOAC 966.23	Accreditation ISO/IEC 17025:2017 A2LA 3329.11	Completed 16Sep2022
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Parameter Aerobic Plate Count	Result < 10 cfu/ml
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UMR8B - Yeast - FDA BAM Chapter 18 mod.	Reference FDA BAM Chapter 18 mod.	Accreditation ISO/IEC 17025:2017 A2LA 3329.11	Completed 19Sep2022
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Parameter Yeast	Result < 10 cfu/ml
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Parameter Moulds	Result < 10 cfu/ml
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ZM55P - Total Coliforms - AOAC 991.14	Reference AOAC 991.14	Accreditation ISO/IEC 17025:2017 A2LA 3329.11	Completed 16Sep2022
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Parameter Coliforms	Result < 10 cfu/ml
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Parameter Escherichia coli	Result < 10 cfu/ml
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CW Hemp - 08

Stephanie Fitzgerald
700 Tech Ct
Louisville, CO 80026

ANALYTICAL REPORT

AR-22-EI-022020-01

Client Code: EI0000162

PO#: QC 325

Received On: 14Sep2022

Reported On: 19Sep2022

Respectfully Submitted,



A handwritten signature in black ink that reads 'Kiley Lynott'.

Kiley Lynott
Operations Support Specialist II

Results shown in this report relate solely to the item submitted for analysis. | Any opinions/interpretations expressed on this report are given independent of the laboratory's scope of accreditation. | All results are reported on an "As Received" basis unless otherwise stated. | Reports shall not be reproduced except in full without written permission of Eurofins Scientific, Inc. | All work done in accordance with Eurofins General Terms and Conditions of Sale: www.eurofinsus.com/terms_and_conditions.pdf | ✓ Indicates a subcontract test to a different lab. Lab(s) are listed at end of the report. For further details about the performing labs please contact your customer service contact at Eurofins. Measurement of uncertainty can be obtained upon request.