

Eurofins Microbiology Laboratory (Colorado)

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CW Hemp - 08

Stephanie Fitzgerald
 700 Tech Ct
 Louisville, CO 80026

Client Code: EI0000162
PO#: QC 325

Received On: 09Feb2023
Reported On: 14Feb2023

ANALYTICAL REPORT

AR-23-EI-002397-01

Eurofins Sample Code: 397-2023-02090092	Sample Registration Date: 09Feb2023
Client Sample Code: 220490B - Composite	Condition Upon Receipt: acceptable, 14.6°C
Sample Description: 25mg Liquid Capsule 60ct	Sample Reference:

UM5DP - Total Coliforms - AOAC 991.14	Reference AOAC 991.14	Accreditation ISO/IEC 17025:2017 A2LA 3329.11	Completed 12Feb2023
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Parameter	Result
Coliforms	< 10 cfu/g

Parameter	Result
Escherichia coli	< 10 cfu/g

UMDTC - Salmonella species - AOAC-RI 121501	Reference AOAC-RI 121501	Accreditation ISO/IEC 17025:2017 A2LA 3329.11	Completed 10Feb2023
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Parameter	Result
Salmonella	Not Detected per 25 g

UMJI2 - Yeast - FDA BAM Chapter 18 mod.	Reference FDA BAM Chapter 18 mod.	Accreditation ISO/IEC 17025:2017 A2LA 3329.11	Completed 14Feb2023
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Parameter	Result
Yeast	< 10 cfu/g

Parameter	Result
Moulds	< 10 cfu/g

UMMFL - Aerobic Plate Count - AOAC 966.23	Reference AOAC 966.23	Accreditation ISO/IEC 17025:2017 A2LA 3329.11	Completed 12Feb2023
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Parameter	Result
Aerobic Plate Count	< 10 cfu/g

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Received On: 09Feb2023

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Respectfully Submitted,



A handwritten signature in black ink, appearing to read 'J. L. Gilgen', written over a horizontal line.

Jake Gilgen
Laboratory Supervisor 4-565

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.

Prepared for:

25mg Liquid Capsule Bulk

CWB HOLDINGS, INC

Batch ID or Lot Number: 220490 - Composite	Test: Potency	Reported: 3/27/23	Location: 700 Tech Ct. Louisville, CO 80027
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Matrix: Concentrate	Test ID: T000235101	Started: 2/15/23	USDA License: N/A
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Status: Active	Method: TM14 (HPLC-DAD): Potency - Broad Spectrum Analysis, 0.01% THC	Received: 02/14/2023 @ 04:13 PM	Sampler ID: N/A
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CANNABINOID PROFILE

Compound	LOD (%)	LOQ (%)	Result (%)	Result (mg/g)	Notes
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.001	0.004	ND	ND	Total THC per container: 1ct = 1.01mg 30ct = 30.56mg 60ct = 61.12mg 90ct = 91.68mg Serving size = 1 capsule
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.001	0.004	0.163	1.63	
Cannabidiolic acid (CBDA)	0.009	0.027	0.034	0.34	
Cannabidiol (CBD)	0.009	0.026	4.211	42.11	
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.009	0.028	<LOQ	<LOQ	
Cannabinolic Acid (CBNA)	0.005	0.016	ND	ND	
Cannabinol (CBN)	0.002	0.007	0.024	0.24	
Cannabigerolic acid (CBGA)	0.007	0.023	ND	ND	
Cannabigerol (CBG)	0.002	0.006	0.069	0.69	
Tetrahydrocannabivarinic Acid (THCVA)	0.006	0.020	ND	ND	
Tetrahydrocannabivarin (THCV)	0.002	0.005	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.004	0.011	ND	ND	
Cannabidivarin (CBDV)	0.002	0.006	0.035	0.35	
Cannabichromenic Acid (CBCA)	0.003	0.009	ND	ND	
Cannabichromene (CBC)	0.003	0.010	0.160	1.60	
Total Cannabinoids			4.696	46.96	
Total Potential THC**			0.163	1.63	
Total Potential CBD**			4.241	42.41	

K Winterheimer
Karen Winterheimer
27-Mar-23
11:21 AM

Samantha Smith
Sam Smith
27-Mar-23
12:45 PM

PREPARED BY / DATE

APPROVED BY / DATE

Definitions

% = % (w/w) = Percent (Weight of Analyte / Weight of Product)

** Total Potential THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step.

Total THC = THC + (THCa *(0.877)) and

Total CBD = CBD + (CBDa *(0.877))

Total Cannabinoids result reflects the absolute sum of all cannabinoids detected.

ND = None Detected (Defined by Dynamic Range of the method)

Testing results are based solely upon the sample submitted to SC Laboratories, Inc. 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. All decision rulings are in accordance with the MED and results uploaded to METRC. This report may not be reproduced, except in full, without the written approval of SC Laboratories, Inc. ISO/IEC 17025:2017 Accredited A2LA Certificate Number 4329.01



CDPHE Certified



Certificate #4329.02



Sample Name:	220490		
Sample Description:	25mg Liquid Capsule Bulk		
Lab Name:	Charlotte's Web QC Lab, 700 Tech Ct., Louisville, CO 80027, Room 203	Sample Analyzed By:	Morgan Stock
Customer:	Charlotte's Web	Test Method ID:	N/A
Contact:	Richard Wright, gateam@charlottesweb.com	Date Sample Received:	13-Feb-23
		Date Sample Analyzed:	16-Feb-23

Calculated Sample Entity Weight

Analysis

Result (g)

Entity Weight

0.746

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	Morgan Stock		16Feb23
Peer Reviewer	Leewaphath Xaiyasang		17Feb23

Certificate of Analysis

Charlotte's Web, Inc.

700 Tech Court
Louisville Colorado 80027 United States

Sample Name:	220490 - Composite	Eurofins Sample:	12627807
Project ID	CHARLO_WEB-20230208-0037	Receipt Date	09-Feb-2023
PO Number	QC 325	Receipt Condition	Ambient temperature
Description	25mg Liquid Capsule Bulk February 1 2023 Expiration February 1 2025	Login Date	08-Feb-2023
		Date Started	09-Feb-2023
		Sampled	Sample results apply as received
		Number Compositated	20
		Online Order	901-2023-E008028

Analysis	Result
Elements by ICP Mass Spectrometry	
Arsenic	<10.0 ppb
Cadmium	<5.00 ppb
Lead	<5.00 ppb
Mercury	<5.00 ppb
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	<1.00 ppb
Sum of B1 B2 G1 and G2	<2.00 ppb
Glyphosate and AMPA	
Glyphosate	<100 ng/g
AMPA	<100 ng/g

Analysis	Limit	Result	Pass/Fail
BCC - Residual Solvent Analysis in Cannabis and Hemp Matrices			
Category I Residual Solvent or Processing Chemical			
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			
Isopropal Alcohol	5000 ppm	<500 ppm	Pass
Acetone	5000 ppm	<200 ppm	Pass

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		Online Order	901-2023-E008028

Analysis	Limit	Result	Pass/Fail
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.			
Summed Group 1 (Butanes)			
Isobutane (2-Methylpropane)		<500 ppm	
Summed Group 2 (Heptanes)			
2,2,3-Trimethylbutane		<50.0 ppm	
2,3-Dimethylpentane		<50.0 ppm	
2,4-Dimethylpentane		<50.0 ppm	
2-Methylhexane		<50.0 ppm	
3,3-Dimethylpentane		<50.0 ppm	
3-Ethylpentane		<50.0 ppm	
3-Methylhexane		<50.0 ppm	
Summed Group 3 (Petroleum Ether)			
2,2-Dimethylbutane		<25.0 ppm	
2,3-Dimethylbutane		<25.0 ppm	
2-Methylpentane		<25.0 ppm	
3-Methylpentane		<25.0 ppm	

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Analysis	Limit	Result	Pass/Fail
BCC - Residual Solvent Analysis in Cannabis and Hemp Matrices			
Summed Group 4 (Xylenes)			
Xylenes-1 (Ethylbenzene)		<40.0 ppm	
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
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

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Analysis	Limit	Result	Pass/Fail
Multi-Residue Analysis for hemp products - BCC Pesticide List			
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
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

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Analysis	Limit	Result	Pass/Fail
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Multi-Residue Analysis for hemp products - BCC Pesticide List

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
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.

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Method References	Testing Location
<p>BCC - Residual Solvent Analysis in Cannabis and Hemp Matrices (CANN_SOL_S)</p> <p>Internally Developed Method</p>	<p>Food Integrity Innovation-Madison 6304 Ronald Reagan Ave Madison, WI 53704 USA</p>
<p>Elements by ICP Mass Spectrometry (ICP_MS_S)</p> <p>Official Methods of Analysis, Methods 2011.19 and 993.14, and 2015.01, AOAC INTERNATIONAL, (Modified).</p>	<p>Food Integrity Innovation-Madison 6304 Ronald Reagan Ave Madison, WI 53704 USA</p>
<p>Glyphosate and AMPA (GLY_AMPA_S)</p> <p>Internally developed method.</p>	<p>Food Integrity Innovation-Madison 6304 Ronald Reagan Ave Madison, WI 53704 USA</p>
<p>Multi-Residue Analysis for hemp products - BCC Pesticide List (PEST_HEMP)</p> <p><i>Official Methods of Analysis, AOAC Official Method 2007.01, Pesticide Residues in Foods by Acetonitrile Extraction and Partitioning with Magnesium Sulfate, AOAC INTERNATIONAL (modified).</i></p> <p><i>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.</i></p> <p>List of the tested pesticides and their limits of quantification (LOQs) are available upon request.</p>	<p>Food Integrity Innovation-Madison 6304 Ronald Reagan Ave Madison, WI 53704 USA</p>
<p>Multi-Residue Analysis for hemp products - BCC Pesticides Fenhexamid and Daminoside (PEST_HEMP)</p> <p><i>Official Methods of Analysis, AOAC Official Method 2007.01, Pesticide Residues in Foods by Acetonitrile Extraction and Partitioning with Magnesium Sulfate, AOAC INTERNATIONAL (modified).</i></p> <p><i>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.</i></p> <p>List of the tested pesticides and their limits of quantification (LOQs) are available upon request.</p>	<p>Food Integrity Innovation-Madison 6304 Ronald Reagan Ave Madison, WI 53704 USA</p>
<p>Mycotoxins in Raw Materials (MYCO_REG_S)</p> <p>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).</p>	<p>Food Integrity Innovation-Madison 6304 Ronald Reagan Ave Madison, WI 53704 USA</p>

Certificate of Analysis

Charlotte's Web, Inc.

700 Tech Court
Louisville Colorado 80027 United States

Testing Location(s)**Released on Behalf of Eurofins by****Food Integrity Innovation-Madison**

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

Edward Ladwig - President Eurofins Food
Chemistry Testing Madison



2918.01

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