



Product : Cannabidiol Oral Solution 2000 mg Batch : TN23J2101H

Manufactured for Down to Earth Primitive Extracts

Certificate of Analysis

Product : Cannabidiol Oral Solution containing CBD Isolate, Hemp Seed Oil

Target 2000 mg of CBD per oz (7.0% w/w)

Batch : TN23J2101H

Timeframe : QA batch release review

Test	Analyte	Acceptance Criteria	Results	Pass	Fail
Chemical	CBD	6.00 to 8.00%	7.55% (108% of target)	✓	
	THC	Not detected	Not detected	✓	
	THC-A	Not detected	Not detected	✓	
Microbiology	Total Aerobic Count	Not detected	Not detected	✓	
	Total Coliforms	Not detected	Not detected	✓	
	Total Yeast & Mold	Not detected	Not detected	✓	
	E. Coli (STEC)	Absent in 25 g	Absent	✓	
	Salmonella	Absent in 25 g	Absent	✓	
Pesticides	Targeted list	Not detected	Not tested*		
Heavy metals	Arsenic As	<1.5 ppm	Not tested*		
	Cadmium Cd	<0.5 ppm	Not tested*		
	Lead Pb	<0.5 ppm	Not tested*		
	Mercury Hg	<1.5 ppm	Not tested*		
Residual solvents	Acetone	<1000 ppm	Not tested*		
	Benzene	<2 ppm	Not tested*		
	Ethanol	<1000 ppm	Not tested*		
	Ethyl Acetate	<1000 ppm	Not tested*		
	Heptane	<1000 ppm	Not tested*		
	Hexane	<60 ppm	Not tested*		
	Isopropyl Alcohol	<1000 ppm	Not tested*		
	Methanol	<600 ppm	Not tested*		
	Pentane	<1000 ppm	Not tested*		
	Propane	<1000 ppm	Not tested*		
	Toluene	<180 ppm	Not tested*		
Total Xylenes	<430 ppm	Not tested*			
Mycotoxins	Aflatoxins (B1, B2, G1, and G2)	<20	Not tested*		
	Aflatoxin B1	<5	Not tested*		
	Ochratoxin	<5	Not tested*		

*Product free of contamination by addition

Batch is acceptable and released

Batch is not acceptable and will not be released

Approved by :

Date : 22FEB23

Down to Earth Primitive Extracts
2000mg CBD tincture in Hemp Seed Oil

Prepared for:

PANACEA LIFE SCIENCES

Batch ID or Lot Number: TN23J2101H	Test: Potency	Reported: 2/2/23	Location: 16194 W 45th Drive Golden, CO 80403
--	-------------------------	----------------------------	---

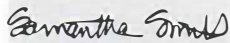
Matrix: Concentrate	Test ID: T000186904	Started: 1/17/23	USDA License: N/A
------------------------	------------------------	---------------------	----------------------

Status: N/A	Method: TM14 (HPLC-DAD): Potency - Broad Spectrum Analysis, 0.01% THC (Colorado Panel)	Received: 01/11/2023 @ 02:51 PM	Sampler ID: N/A
----------------	---	------------------------------------	--------------------

CANNABINOID PROFILE

Compound	LOD (%)	LOQ (%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.002	0.008	ND	ND
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.003	0.009	ND	ND
Cannabidiolic acid (CBDA)	0.051	0.161	ND	ND
Cannabidiol (CBD)	0.050	0.157	7.544	70.17
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.049	0.155	ND	ND
Cannabinolic Acid (CBNA)	0.028	0.089	ND	ND
Cannabinol (CBN)	0.013	0.041	ND	ND
Cannabigerolic acid (CBGA)	0.041	0.130	ND	ND
Cannabigerol (CBG)	0.010	0.031	ND	ND
Tetrahydrocannabinavarinic Acid (THCVA)	0.035	0.110	ND	ND
Tetrahydrocannabinavarin (THCV)	0.009	0.028	ND	ND
Cannabidivarinic Acid (CBDVA)	0.021	0.067	ND	ND
Cannabidivarin (CBDV)	0.012	0.037	0.038	0.38
Cannabichromenic Acid (CBCA)	0.016	0.050	ND	ND
Cannabichromene (CBC)	0.017	0.055	ND	ND
Total Cannabinoids			7.582	70.56
Total Potential THC**			0	0
Total Potential CBD**			7.544	70.56


 Hannah Wright
 02-Feb-2023
 01:57 PM


 Sam Smith
 2-Feb-23
 2:22 PM

PREPARED BY / DATE

APPROVED BY / DATE

Definitions

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

* Indicates a value below the Limit of Quantitation (LOQ) and above the Limit of Detection (LOD).

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

$$\text{Total THC} = \text{THC} + (\text{THCA} * 0.877)$$

$$\text{Total CBD} = \text{CBD} + (\text{CBDA} * 0.877)$$

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 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.



Down to Earth Primitive Extracts
2000mg CBD tincture in Hemp Seed Oil

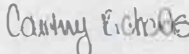
Prepared for:
PANACEA LIFE SCIENCES

Batch ID or Lot Number: TN23I2101H	Test: Microbial Contaminants	Reported: 2/1/23	Location: 16194 W 45th Drive Golden, CO 80403
Matrix: Finished Product	Test ID: T000186905	Started: 1/12/23	USDA License: N/A
Status: N/A	Methods: TM25 (qPCR) TM24, TM26, TM27(Culture Plating): Microbial (Colorado Panel)	Received: 01/11/2023 @ 02:51 PM	Sampler ID: N/A

MICROBIAL CONTAMINANTS DETERMINATION

Contaminant	Method	LOD	LLOQ	ULOQ	Result	Notes
Total Aerobic Count*	TM-26, Culture Plating	10 ² CFU/g	10 ³ CFU/g	1.5x10 ⁵ CFU/g	None Detected	Free from visual mold, mildew, and foreign matter
Total Coliforms*	TM-27, Culture Plating	10 ¹ CFU/g	10 ² CFU/g	1.5x10 ⁴ CFU/g	None Detected	
Total Yeast and Mold*	TM-24, Culture Plating	10 ¹ CFU/g	10 ² CFU/g	1.5x10 ⁴ CFU/g	None Detected	
E. coli (STEC)	TM-25, PCR	1 CFU/25 g	NA	NA	Absent	Amendment to report T000186905 for batch ID correction. SCH01Feb2022
Salmonella	TM-25, PCR	1 CFU/25 g	NA	NA	Absent	


Sarah Henning
2/1/2023
12:13:00 PM


Courtney Richards
2/1/2023
1:40:00 PM

PREPARED BY / DATE

APPROVED BY / DATE

Definitions

LOD = Limit of Detection | LLOQ = Lower Limit of Quantitation | ULOQ = Upper Limit of Quantitation
CFU/g = Colony Forming Units per Gram | STEC = Shiga Toxin-Producing *E. coli*
* 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

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.



CDPHE Certified



Certificate #4329.02

CERTIFICATE OF ANALYSIS

Prepared for:
PANACEA LIFE SCIENCES


16194 W 45th Drive
Golden, CO USA 80403

CBD Isolate

Batch ID or Lot Number: 8375	Test: Heavy Metals	Reported: 28Mar2022	USDA License: NA
Matrix: Concentrate Co	Test ID: T000199480	Started: 24Mar2022	Sampler ID: NA
	Method(s): TM19 (ICP-MS): Heavy Metals	Received: 23Mar2022	Status: NA

Heavy Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.04 - 4.26	ND	
Cadmium	0.04 - 4.31	ND	
Mercury	0.04 - 4.34	ND	
Lead	0.04 - 4.32	ND	

Final Approval



Kayla Phye
28Mar2022
09:59:00 AM MDT

PREPARED BY / DATE



Ryan Weems
28Mar2022
10:02:00 AM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/9508febb-60ad-4ad1-845c-428400755137>

Definitions

ND = None Detected (defined by dynamic range of the method)
Dynamic Range = Limit of Quantitation (LOQ) through Upper Limit of Method Range

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 17025:2005 Accredited A2LA.



Cert #4329.02

CDPHE Certified

9508febb60ad4ad1845c428400755137.1