

Prepared for:

Organic 4% Blend CBD Organic Hemp Extract **Pet.Releaf**

Batch ID or Lot Number: O-1071-1216-RE-OFFB	Test: Potency	Reported: 12/30/21	Location: 8100 Southpark Way Ste A3 Littleton, CO 80120
---	-------------------------	------------------------------	---


Matrix: Concentrate	Test ID: T000185034	Started: 12/29/21	USDA License: N/A
------------------------	------------------------	----------------------	----------------------

Status: N/A	Method: TM14 (HPLC-DAD): Potency - Standard Cannabinoid Analysis (Colorado Panel)	Received: 12/29/2021 @ 09:34 AM	Sampler ID: N/A
----------------	--	------------------------------------	--------------------

CANNABINOID PROFILE

Compound	LOD (%)	LOQ (%)	Result (%)	Result (mg/g)	Notes
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.014	0.044	ND	ND	N/A
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.015	0.050	0.110	1.10	
Cannabidiolic acid (CBDA)	0.016	0.058	0.051*	0.51*	
Cannabidiol (CBD)	0.016	0.057	4.163	41.63	
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.017	0.055	ND	ND	
Cannabinolic Acid (CBNA)	0.010	0.032	ND	ND	
Cannabinol (CBN)	0.004	0.014	0.006*	0.06*	
Cannabigerolic acid (CBGA)	0.014	0.046	ND	ND	
Cannabigerol (CBG)	0.003	0.011	0.091	0.91	
Tetrahydrocannabivarinic Acid (THCVA)	0.012	0.039	ND	ND	
Tetrahydrocannabivarin (THCV)	0.003	0.010	0.004*	0.04*	
Cannabidivarinic Acid (CBDVA)	0.007	0.024	ND	ND	
Cannabidivarin (CBDV)	0.004	0.013	0.033	0.33	
Cannabichromenic Acid (CBCA)	0.005	0.018	ND	ND	
Cannabichromene (CBC)	0.006	0.020	0.255	2.55	
Total Cannabinoids			4.713	47.13	
Total Potential THC**			0.110	1.10	
Total Potential CBD**			4.208	42.08	


 Sam Smith
 30-Dec-2021
 12:19 PM


 Karen Winternheimer
 30-Dec-21
 12:23 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.

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 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

Prepared for:

Organic 4% Blend CBD Organic Hemp Extract
Pet.Releaf


Batch ID or Lot Number: O-1071-1216-RE-OFFB	Test: Pesticides	Reported: 12/29/21	Location: 8100 Southpark Way Ste A3 Littleton, CO 80120
---	----------------------------	------------------------------	---


Matrix: Concentrate	Test ID: t000183000	Started: 12/28/21	USDA License: N/A
------------------------	------------------------	----------------------	----------------------

Status: N/A	Method: TM17(LC-QQQ LC MS/MS):	Received: 12/17/2021 @ 10:30 AM	Sampler ID: N/A
----------------	-----------------------------------	------------------------------------	--------------------

PESTICIDE DETERMINATION

Compound	LOQ (ppb)	Result (ppb)	Compound	LOQ (ppb)	Result (ppb)	Compound	LOQ (ppb)	Result (ppb)
Acephate	40	ND	Fenoxycarb	44	ND	Paclobutrazol	41	ND
Acetamiprid	42	ND	Fipronil	40	ND	Permethrin	301	ND
Avermectin	388	ND	Flonicamid	39	ND	Phosmet	42	ND
Azoxystrobin	44	ND	Fludioxonil	287	ND	Prophos	284	ND
Bifenazate	41	ND	Hexythiazox	38	ND	Propoxur	41	ND
Boscalid	41	ND	Imazalil	291	ND	Pyridaben	299	ND
Carbaryl	34	ND	Imidacloprid	45	ND	Spinosad A	35	ND
Carbofuran	39	ND	Kresoxim-methyl	150	ND	Spinosad D	53	ND
Chlorantraniliprole	46	ND	Malathion	281	ND	Spiromesifen	282	ND
Chlorpyrifos	500	ND	Metalaxyl	44	ND	Spirotetramat	290	ND
Clofentezine	291	ND	Methiocarb	43	ND	Spiroxamine 1	17	ND
Diazinon	282	ND	Methomyl	43	ND	Spiroxamine 2	22	ND
Dichlorvos	292	ND	MGK 264 1	170	ND	Tebuconazole	284	ND
Dimethoate	41	ND	MGK 264 2	115	ND	Thiacloprid	40	ND
E-Fenpyroximate	292	ND	Myclobutanil	38	ND	Thiamethoxam	39	ND
Etofenprox	41	ND	Naled	40	ND	Trifloxystrobin	40	ND
Etoxazole	304	ND	Oxamyl	1500	ND			


 Sam Smith
 12/29/2021
 9:54:00 AM


 Courtney Richards
 12/29/2021
 1:38:00 PM

PREPARED BY / DATE

APPROVED BY / DATE

Definitions

LOQ = Limit of Quantification
 ppb = Parts per Billion

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.



Certificate #4329.02

Prepared for:

Organic 4% Blend CBD Organic Hemp Extract

Pet.Releaf


Batch ID or Lot Number: O-1071-1216-RE-OFFB	Test: Residual Solvents	Reported: 12/22/21	Location: 8100 Southpark Way Ste A3 Littleton, CO 80120
---	-----------------------------------	------------------------------	---


Matrix: N/A	Test ID: t000183003	Started: 12/21/21	USDA License: N/A
----------------	------------------------	----------------------	----------------------

Status: N/A	Methods: TM04 (GC-MS): Residual Solvents (Colorado Panel)	Received: 12/17/2021 @ 10:30 AM	Sampler ID: N/A
----------------	---	------------------------------------	--------------------

RESIDUAL SOLVENTS DETERMINATION

Solvent	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	92 - 1841	*ND	
Butanes (Isobutane, n-Butane)	178 - 3555	*ND	
Methanol	60 - 1204	*ND	
Pentane	93 - 1860	*ND	
Ethanol	94 - 1884	*ND	
Acetone	101 - 2011	*ND	
Isopropyl Alcohol	101 - 2030	*ND	
Hexane	6 - 122	*ND	
Ethyl Acetate	101 - 2013	*ND	
Benzene	0.2 - 4.2	*ND	
Heptanes	97 - 1940	*ND	
Toluene	18 - 368	*ND	
Xylenes (m,p,o-Xylenes)	133 - 2670	*ND	

 Ryan Weems
22-Dec-21
1:16 PM

 Sam Smith
22-Dec-21
1:21 PM

PREPARED BY / DATE

APPROVED BY / DATE

Definitions

* 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.



CDPHE Certified



Certificate #4329.02

Prepared for:

Organic 4% Blend CBD Organic Hemp Extract
Pet.Releaf


Batch ID or Lot Number: O-1071-1216-RE-OFFB	Test: Microbial Contaminants	Reported: 12/20/21	Location: 8100 Southpark Way Ste A3 Littleton, CO 80120
---	--	------------------------------	---


Matrix: Concentrate	Test ID: T000183001	Started: 12/17/21	USDA License: N/A
------------------------	------------------------	----------------------	----------------------

Status: N/A	Methods: TM25 (qPCR) TM24, TM26, TM27(Culture Plating): Microbial (Colorado Panel)	Received: 12/17/2021 @ 10:30 AM	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	
Salmonella	TM-25, PCR	1 CFU/25 g	NA	NA	Absent	


 Eden Thompson-Wright
 12/20/2021
 3:30:00 PM


 Brett Hudson
 12/20/2021
 5:23:00 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

Prepared for:


Organic 4% Blend CBD Organic Hemp Extract

Pet.Releaf

Batch ID or Lot Number: O-1071-1216-RE-OFFB	Test: Metals	Reported: 12/22/21	Location: 8100 Southpark Way Ste A3 Littelton, CO 80120
Matrix: Concentrate Co	Test ID: T000183002	Started: 12/20/21	USDA License: N/A
Status: N/A	Method: TM19 (ICP-MS); Heavy Metals (Colorado Panel)	Received: 12/17/2021 @ 10:30 AM	Sampler ID: N/A

HEAVY METALS DETERMINATION

Compound	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.046 - 4.64	ND	0
Cadmium	0.049 - 4.88	ND	
Mercury	0.048 - 4.77	ND	
Lead	0.048 - 4.80	ND	

 Ryan Weems
22-Dec-21
9:10 AM

PREPARED BY / DATE

 Sam Smith
22-Dec-21
9:13 AM

APPROVED BY / DATE

Definitions

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.



CDPHE Certified



Certificate #4329.02

Prepared for:

Organic 4% Blend CBD Organic Hemp Extract
Pet.Releaf

Batch ID or Lot Number: O-1071-1216-RE-OFFB	Test: Mycotoxins	Reported: 12/22/21	Location: 8100 Southpark Way Ste A3 Littleton, CO 80120
Matrix: Concentrate	Test ID: T000183004	Started: 12/21/21	USDA License: N/A
Status: N/A	Method: TM18 (UHPLC-QQQ LCMS/MS): Mycotoxins (Colorado Panel)	Received: 12/17/2021 @ 10:30 AM	Sampler ID: N/A

MYCOTOXIN DETERMINATION

Compound	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	4.6 - 134.2	ND	N/A
Aflatoxin B1	1.1 - 35	ND	
Aflatoxin B2	1.1 - 34.9	ND	
Aflatoxin G1	1.1 - 35.2	ND	
Aflatoxin G2	1 - 33.9	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	



 Justin Thomson 01/11/2022
 NPD & Quality Manager



 Sam Smith
 22-Dec-21
 9:43 AM

PREPARED BY / DATE



 Ryan Weems
 22-Dec-21
 9:45 AM

APPROVED BY / DATE

Definitions

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.



CDPHE Certified



Certificate #4329.02