CERTIFICATE OF ANALYSIS

PRODUCT NAME:	Organic Green Apple Gummies
PRODUCT STRENGTH:	10 mg CBD / gummy
BATCH:	220609A
BEST BY DATE:	6/9/2024
HEMP EXTRACT LOT:	616

Physical Atttributes

Test	Method	Specification	Results
Color	Internal	Medium Green	PASS
Odor	Internal	Sweet, apple, sour	PASS
Appearance	Internal	Medium green gummies with sugar coating in child proof container	PASS
Primary Package Eval.	Internal	Container clean and free of filth. Container caps tight and seals intact	PASS
Secondary Package Eval.	Internal	Labeling Compliance Checked, Sufficient cushion material exists. Box taped and secure.	PASS

Review of Third-Party Analysis

Panel	Method	Specification	Results*	Pass/Fail
Potency - Total CBD	HPLC-UV DAD	*NLT10 mg/ Gummy	**12.8mg**	PASS
Potency - D9-THC	HPLC-UV DAD	LOQ: <0.01% (broad spectrum)	**ND**	PASS
Expanded Pesticide Panel	HPLC-QQQ	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	**Below LOQ**	PASS
Microbial Escherichia coli (STEC)	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	**Absent**	PASS
Microbial Salmonella	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	**Absent**	PASS
Microbial Yeast and Mold	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10^2 CFU/gram	**Below LOQ**	PASS
Microbial Total Coliforms*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10^2 CFU/gram	**Below LOQ**	PASS
Microbial Total Aerobic Count*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10^3 CFU/gram	**Below LOQ**	PASS
Heavy Metals Panel	ICP-MS	Arsenic (As): ≤1.5 ppm Cadmium (Cd): ≤0.5 ppm Lead (Pb): ≤0.5 ppm Mercury (Hg): ≤1.5 ppm	**Below LOQ**	PASS
Mycotoxins	ICP-MS	Total Aflatoxins <20 ppb† Afltoxin B1 < 5 ppb Ochratoxin < 5ppb	**Below LOQ**	PASS
Residual Solvents	GC-HS-MSD	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	**Below LOQ**	PASS

* *Level of Quantitation, † Parts Per Million † Part Per Billion CFU/g=Colony Forming Units per Gram
* Nothing Less Than Manufacture*
10^2=100 CFU
10^3=1,000 CFU

Quality Certified — Name

6/28/22 — Date

botanacor

CERTIFICATE OF ANALYSIS

10mg BS Green Apple (organic)

Batch ID or Lot Number:	Test, Test ID and Methods:	Matrix:	
616	Various	Concentrate	
Reported:	Started:	Received:	
19May2022	27Apr2022	26Apr2022	

Cannabinoids - Colorado Compliance

Test ID: T000203995
Methods: TM14 (HPLC-DAD): Potency – Standard

Cannabinoid Analysis	**LOD** (%)	**LOQ** (%)	**Result** (%)	**Result** (mg/g)	**Notes**
Cannabichromene (CBC)	0.011	0.022	ND	ND	Amendment to T000203995 issued 26Apr2022 to correct batch ID.
Cannabichromenic Acid (CBCA)	0.010	0.020	ND	ND	
Cannabidiol (CBD)	0.034	0.060	0.388	3.88	
Cannabidiolic Acid (CBDA)	0.035	0.061	ND	ND	
Cannabidivarin (CBDV)	0.008	0.014	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.014	0.025	ND	ND	
Cannabigerol (CBG)	0.006	0.013	0.036	0.36	
Cannabigerolic Acid (CBGA)	0.025	0.052	ND	ND	
Cannabinol (CBN)	0.008	0.016	ND	ND	
Cannabinolic Acid (CBNA)	0.017	0.036	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.030	0.062	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.027	0.057	ND	ND	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.024	0.050	ND	ND	
Tetrahydrocannabivarin (THCV)	0.005	0.011	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.021	0.044	ND	ND	
Total Cannabinoids			**0.424**	**4.24**	
Total Potential THC			ND	ND	
Total Potential CBD			0.388	3.88	

Final Approval

Sam Smith
19May2022
02:14:00 PM MDT
PREPARED BY / DATE

Ryan Weems
19May2022
02:18:00 PM MDT
APPROVED BY / DATE

Heavy Metals - Colorado Compliance

Test ID: T000203998
Methods: TM19 (ICP-MS): Heavy

Metals	**Dynamic Range** (ppm)	**Result** (ppm)	**Notes**
Arsenic	0.04 - 4.31	ND	Amendment to certificate T000203998 issued on 27Apr2022, batch ID updated.
Cadmium	0.04 - 4.25	ND	
Mercury	0.04 - 4.21	ND	
Lead	0.04 - 4.11	ND	

Final Approval

Ryan Weems
19May2022
01:47:00 PM MDT
PREPARED BY / DATE

Sam Smith
19May2022
02:21:00 PM MDT
APPROVED BY / DATE

botanacor

CERTIFICATE OF ANALYSIS

10mg BS Green Apple (organic)

Batch ID or Lot Number:	Test, Test ID and Methods:	Matrix:	Page 1 of 5
616	Various	Concentrate	
Reported:	Started:	Received:	
19May2022	27Apr2022	26Apr2022	

Pesticides

Test ID: T000203996
Methods: TM17

(LC-QQ LC MS/MS)	**Dynamic Range** (ppb)	**Result** (ppb)		**Dynamic Range** (ppb)	**Result** (ppb)
Abamectin	285 - 2628	ND	Malathion	282 - 2708	ND
Acephate	38 - 2770	ND	Metalaxyl	45 - 2675	ND
Acetamiprid	39 - 2819	ND	Methiocarb	42 - 2677	ND
Azoxystrobin	46 - 2530	ND	Methomyl	40 - 2841	ND
Bifenazate	48 - 2573	ND	MGK 264 1	173 - 1600	ND
Boscalid	47 - 2600	ND	MGK 264 2	109 - 1113	ND
Carbaryl	42 - 2744	ND	Myclobutanil	15 - 2793	ND
Carbofuran	45 - 2678	ND	Naled	53 - 2738	ND
Chlorantraniliprole	61 - 2572	ND	Oxamyl	38 - 2874	ND
Chlorpyrifos	48 - 2876	ND	Paclobutrazol	42 - 2774	ND
Clofentezine	246 - 2796	ND	Permethrin	300 - 2836	ND
Diazinon	294 - 2647	ND	Phosmet	44 - 2680	ND
Dichlorvos	279 - 2796	ND	Prophos	285 - 2734	ND
Dimethoate	41 - 2757	ND	Propoxur	42 - 2745	ND
E-Fenpyroximate	296 - 2610	ND	Pyridaben	291 - 2779	ND
Etofenprox	41 - 2786	ND	Spinosad A	35 - 2261	ND
Etoxazole	301 - 2740	ND	Spinosad D	48 - 509	ND
Fenoxycarb	33 - 2712	ND	Spiromesifen	316 - 2783	ND
Fipronil	32 - 2578	ND	Spirotetramat	248 - 2558	ND
Flonicamid	48 - 2811	ND	Spiroxamine 1	19 - 1170	ND
Fludioxonil	297 - 2676	ND	Spiroxamine 2	26 - 1553	ND
Hexythiazox	44 - 2697	ND	Tebuconazole	275 - 2750	ND
Imazalil	300 - 2740	ND	Thiacloprid	42 - 2777	ND
Imidacloprid	40 - 2795	ND	Thiamethoxam	40 - 2739	ND
Kresoxim-methyl	66 - 2546	ND	Trifloxystrobin	45 - 2705	ND

Final Approval

Ryan Weems
19May2022
02:09:00 PM MDT
PREPARED BY / DATE

Sam Smith
19May2022
02:26:00 PM MDT
APPROVED BY / DATE

10mg BS Green Apple (organic)

Batch ID or Lot Number:	Test, Test ID and Methods:	Matrix:	Page 2 of 5
616	Various	Concentrate	
Reported:	Started:	Received:	
19May2022	27Apr2022	26Apr2022	

Residual Solvents - Colorado Compliance

Test ID: T000203999
Methods: TM04 (GC-MS): Residual Solvents

	Dynamic Range (ppm)	**Result** (ppm)	**Notes**
Propane	81 - 1614	ND	Amendment to certificate T000203999 issued on 29Apr2022, batch ID updated.
Butanes (Isobutane, n-Butane)	163 - 3254	ND	
Methanol	59 - 1184	ND	
Pentane	86 - 1725	ND	
Ethanol	92 - 1845	>1845	
Acetone	93 - 1851	ND	
Isopropyl Alcohol	99 - 1987	ND	
Hexane	6 - 118	ND	
Ethyl Acetate	96 - 1922	ND	
Benzene	0.2 - 3.9	ND	
Heptanes	94 - 1871	ND	
Toluene	17 - 345	ND	
Xylenes (m,p,o-Xylenes)	125 - 2496	ND	

Final Approval

Ryan Weems
19May2022
12:46:00 PM MDT

PREPARED BY / DATE

Sam Smith
19May2022
02:33:00 PM MDT

APPROVED BY / DATE

botanacor

CERTIFICATE OF ANALYSIS

10mg BS Green Apple (organic)

Batch ID or Lot Number:	Test, Test ID and Methods:	Matrix:	
616	Various	Concentrate	
Reported:	Started:	Received:	
19May2022	27Apr2022	26Apr2022	

Mycotoxins - Colorado Compliance

Test ID: T000204000
Methods: TM18 (UHPLC-QQQ LCMS/MS): Mycotoxins

	Dynamic Range (ppb)	**Result** (ppb)	**Notes**
Ochratoxin A	2.34 - 132.99	ND	Amendment to T000204000 issued28Apr2022 to correct batch ID.
Aflatoxin B1	1.08 - 35.62	ND	N/A
Aflatoxin B2	1.19 - 34.91	ND	
Aflatoxin G1	1.08 - 35.15	ND	
Aflatoxin G2	1.15 - 34.54	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	

Final Approval

Sam Smith
19May2022
12:46:00 PM MDT

PREPARED BY / DATE

Ryan Weems
19May2022
12:51:00 PM MDT

APPROVED BY / DATE

botanacor

CERTIFICATE OF ANALYSIS

10mg BS Green Apple (organic)

Batch ID or Lot Number:	Test, Test ID and Methods:	Matrix:	Page 5 of 5
616	Various	Concentrate	
Reported:	Started:	Received:	
19May2022	27Apr2022	26Apr2022	

Microbial Contaminants - Colorado Compliance

Test ID: T000203997
Methods: TM25 (qPCR) TM24, TM26, TM27 (Culture Plating): Microbial (Colorado Panel)

	Method	LOD	Quantitation Range	Result	Notes
STEC	TM25: PCR	10^0 CFU/25g	NA	Absent	Free from visual mold, mildew, and foreign matter Amendment to report T000203997 for batch ID correction. SCH 19May2022
Salmonella	TM25: PCR	10^0 CFU/25g	NA	Absent	
Total Yeast and Mold*	TM24: Culture Plating	10^1 CFU/g	$1.0x10^2$ - $1.5x10^4$	None Detected	
Total Aerobic Count*	TM26: Culture Plating	10^2 CFU/g	$1.0x10^3$ - $1.5x10^5$	None Detected	
Total Coliforms*	TM27: Culture Plating	10^1 CFU/g	$1.0x10^2$ - $1.5x10^4$	None Detected	

Final Approval

Sarah Henning
19May2022
03:17:00 PM MDT
PREPARED BY / DATE

Carly Bader
19May2022
03:55:00 PM MDT
APPROVED BY / DATE

https://results.botanacor.com/api/v1/coas/uuid/20161338-dc2b-40de-ae00-ab0eaecad34e

Definitions
LOD = Limit of Detection, ULOQ = Upper Limit of Quantitation, LLOQ = Lower Limit of Quantitation, PPB = Parts per Billion, % = % (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)). Fail equates to a concentration level of Delta 9-THC, on a dry weight basis, higher than 0.3 percent + or – the measurement uncertainty. Total Potential THC 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)). ALOQ = Above Limit Of Quantitation (defined by dynamic range of the method), CFU/g = Colony Forming Units per Gram. Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form. Examples: 10^2 = 100 CFU, 10^3 = 1,000 CFU, 10^4 = 10,000 CFU, 10^5 = 100,000 CFU.

Cert #4329.02
20161338dc2b40deae00ab0eaecad34e.1