



CERTIFICATE OF ANALYSIS

PRODUCT NAME: THC:CBD Gummies
PRODUCT STRENGTH: 25mg CBD, 5mg THC
BATCH: 220510A
BEST BY DATE: 09/2023
EXTRACT LOT: 00635

Physical Attributes

Test	Method	Specification	Results
Color	Internal	Multicolored	PASS
Odor	Internal	Sweet	PASS
Appearance	Internal	Sugar Coated	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	*LOQ: ≥ 10 mg / gummy	32.4 mg	PASS
Potency - D9-THC	HPLC-UV DAD	LOQ: $<0.01\%$ (broad spectrum)	6.6mg	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	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	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 < 5 ppb	Below LOQ	PASS
Residual Solvents	GC-HS-MSD	LOQ: Complies with CDPHE 6 CCR in effect during MFG*	Below LOQ	PASS

*Level of Quantification
 **Colony Forming Units per Gram
 † Parts Per Million †† Part Per Billion

Values expressed in scientific notation.
 Examples:
 $10^2=100$
 $10^3=1,000$

Quality Certified

5/12/22

Date

5:1 25mg Blueberry Lemonade Mother Liquor

Batch ID or Lot Number: 00635	Test, Test ID and Methods: Various	Matrix: Unit	Page 1 of 1
Reported: 04May2022	Started: 04May2022	Received: 04May2022	


Cannabinoids - Colorado Compliance

Test ID: T000205888

Methods: TM14 (HPLC-DAD): Potency – Standard

Cannabinoid Analysis	LOD (mg)	LOQ (mg)	Result (mg)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.248	0.774	5.230	1.58	# of Servings = 1 Sample Weight=3.3g
Cannabichromenic Acid (CBCA)	0.226	0.708	ND	ND	
Cannabidiol (CBD)	0.653	2.067	32.413	9.82	
Cannabidiolic Acid (CBDA)	0.670	2.120	ND	ND	
Cannabidivarin (CBDV)	0.154	0.489	0.601	0.18	
Cannabidivarinic Acid (CBDVA)	0.279	0.884	ND	ND	
Cannabigerol (CBG)	0.141	0.439	3.011	0.91	
Cannabigerolic Acid (CBGA)	0.588	1.836	ND	ND	
Cannabinol (CBN)	0.183	0.573	1.003	0.30	
Cannabinolic Acid (CBNA)	0.401	1.253	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.700	2.187	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.636	1.987	6.613	2.00	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.563	1.760	ND	ND	
Tetrahydrocannabivarin (THCV)	0.128	0.400	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.497	1.553	ND	ND	
Total Cannabinoids			48.871	14.81	
Total Potential THC			6.613	2.00	
Total Potential CBD			32.413	9.82	

Final Approval


 Sam Smith
 04May2022
 03:44:00 PM MDT

PREPARED BY / DATE


 Jacob Miller
 04May2022
 03:53:00 PM MDT

APPROVED BY / DATE


<https://results.botanacor.com/api/v1/coas/uuid/d63697ce-a34e-435b-8185-7a812d85645d>
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: 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. ISO/IEC 17025:2017 Accredited by A2LA. Some tests listed on this COA may not be within our scope of A2LA accreditation. Please visit [A2LA for more details](#).



Cert #4329.02

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Pineapple 5:1 ML Gummies 25mg CBD + 5mg THC

Batch ID or Lot Number: Lot: 00633	Test: Potency	Reported: 04May2022	USDA License: N/A
Matrix: Unit	Test ID: T000205882	Started: 04May2022	Sampler ID: N/A
	Method(s): TM14 (HPLC-DAD): Potency – Standard Cannabinoid Analysis	Received: 04May2022	Status: Active

Cannabinoids

	LOD (mg)	LOQ (mg)	Result (mg)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.252	0.786	5.079	1.54	# of Servings = 1 Sample Weight=3.3g
Cannabichromenic Acid (CBCA)	0.230	0.719	ND	ND	
Cannabidiol (CBD)	0.664	2.101	31.432	9.52	
Cannabidiolic Acid (CBDA)	0.681	2.155	ND	ND	
Cannabidivarin (CBDV)	0.157	0.497	0.546	0.17	
Cannabidivarinic Acid (CBDVA)	0.284	0.899	ND	ND	
Cannabigerol (CBG)	0.143	0.446	2.939	0.89	
Cannabigerolic Acid (CBGA)	0.597	1.866	ND	ND	
Cannabinol (CBN)	0.186	0.582	0.970	0.29	
Cannabinolic Acid (CBNA)	0.407	1.273	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.712	2.224	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.646	2.019	6.449	1.95	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.573	1.789	ND	ND	
Tetrahydrocannabivarin (THCV)	0.130	0.406	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.505	1.578	ND	ND	
Total Cannabinoids			47.415	14.37	
Total Potential THC			6.449	1.95	
Total Potential CBD			31.432	9.52	

Final Approval


 Sam Smith
 04May2022
 03:44:00 PM MDT
 PREPARED BY / DATE


 Jacob Miller
 04May2022
 03:53:00 PM MDT
 APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/366a30f3-f615-49c5-b585-683f7170359e>

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)).

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Cert #4329.02

CDPHE Certified
 366a30f3f61549c5b585683f7170359e.1

5:1 25mg Orange Mother Liquor

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


Cannabinoids - Colorado Compliance

Test ID: T000204116

Methods: TM14 (HPLC-DAD): Potency – Standard

Cannabinoid Analysis

	LOD (%)	LOQ (%)	Result (%)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.007	0.022	0.134	1.34	
Cannabichromenic Acid (CBCA)	0.007	0.020	ND	ND	
Cannabidiol (CBD)	0.017	0.059	0.816	8.16	
Cannabidiolic Acid (CBDA)	0.018	0.061	ND	ND	
Cannabidivarin (CBDV)	0.004	0.014	0.014	0.14	
Cannabidivarinic Acid (CBDVA)	0.007	0.025	ND	ND	
Cannabigerol (CBG)	0.004	0.013	0.076	0.76	
Cannabigerolic Acid (CBGA)	0.018	0.052	ND	ND	
Cannabinol (CBN)	0.006	0.016	0.024	0.24	
Cannabinolic Acid (CBNA)	0.012	0.036	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.021	0.062	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.019	0.057	0.166	1.66	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.017	0.050	ND	ND	
Tetrahydrocannabivarin (THCV)	0.004	0.011	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.015	0.044	ND	ND	
Total Cannabinoids			1.230	12.30	
Total Potential THC			0.166	1.66	
Total Potential CBD			0.816	8.16	

Final Approval

Daniel Weidensaul
27Apr2022
01:34:00 PM MDT

PREPARED BY / DATE



Jacob Miller
27Apr2022
01:36:00 PM MDT

APPROVED BY / DATE

5:1 25mg Orange Mother Liquor

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

**Residual Solvents -
Colorado Compliance**

Test ID: T000204120

Methods: TM04 (GC-MS): Residual

Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	98 - 1962	ND	
Butanes (Isobutane, n-Butane)	198 - 3955	ND	
Methanol	72 - 1439	ND	
Pentane	105 - 2096	ND	
Ethanol	112 - 2243	>2243	
Acetone	113 - 2250	ND	
Isopropyl Alcohol	121 - 2415	ND	
Hexane	7 - 143	ND	
Ethyl Acetate	117 - 2336	ND	
Benzene	0.2 - 4.8	ND	
Heptanes	114 - 2274	ND	
Toluene	21 - 419	ND	
Xylenes (m,p,o-Xylenes)	152 - 3033	ND	

Final Approval

Jacob Miller
29Apr2022
11:18:00 AM MDT
PREPARED BY / DATE



Ryan Weems
29Apr2022
11:20:00 AM MDT
APPROVED BY / DATE

5:1 25mg Orange Mother Liquor

Batch ID or Lot Number:	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 3 of 5
Reported: 27Apr2022	Started: 27Apr2022	Received: 27Apr2022	

Microbial Contaminants - Colorado Compliance

Test ID: T000204118
 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
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

 Eden Thompson-Wright 30Apr2022 01:41:00 PM MDT PREPARED BY / DATE	 Brett Hudson 02May2022 09:51:00 AM MDT APPROVED BY / DATE
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Heavy Metals - Colorado Compliance

Test ID: T000204119
 Methods: TM19 (ICP-MS): Heavy Metals

Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.04 - 4.20	ND	
Cadmium	0.04 - 4.27	ND	
Mercury	0.04 - 4.28	ND	
Lead	0.04 - 4.19	ND	

Final Approval

 Sam Smith 02May2022 07:54:00 AM MDT PREPARED BY / DATE	 Alex Smith 02May2022 11:55:00 AM MDT APPROVED BY / DATE
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5:1 25mg Orange Mother Liquor

Batch ID or Lot Number:	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 4 of 5
Reported: 27Apr2022	Started: 27Apr2022	Received: 27Apr2022	


Pesticides

Test ID: T000204117

Methods: TM17

(LC-QQ LC MS/MS)	Dynamic Range (ppb)	Result (ppb)		Dynamic Range (ppb)	Result (ppb)	
Abamectin	286 - 2722	ND		Malathion	306 - 2674	ND
Acephate	41 - 2729	ND		Metalaxyl	42 - 2696	ND
Acetamiprid	42 - 2729	ND		Methiocarb	42 - 2689	ND
Azoxystrobin	42 - 2640	ND		Methomyl	39 - 2710	ND
Bifenazate	43 - 2645	ND		MGK 264 1	181 - 1627	ND
Boscalid	39 - 2763	ND		MGK 264 2	126 - 1144	ND
Carbaryl	38 - 2724	ND		Myclobutanil	47 - 2742	ND
Carbofuran	41 - 2722	ND		Naled	47 - 2761	ND
Chlorantraniliprole	49 - 2731	ND		Oxamyl	41 - 2719	ND
Chlorpyrifos	46 - 2795	ND		Paclobutrazol	42 - 2714	ND
Clofentezine	282 - 2718	ND		Permethrin	313 - 2784	ND
Diazinon	307 - 2708	ND		Phosmet	42 - 2697	ND
Dichlorvos	272 - 2708	ND		Prophos	269 - 2697	ND
Dimethoate	41 - 2694	ND		Propoxur	42 - 2728	ND
E-Fenpyroximate	302 - 2741	ND		Pyridaben	298 - 2758	ND
Etofenprox	41 - 2775	ND		Spinosad A	36 - 2243	ND
Etoxazole	300 - 2746	ND		Spinosad D	49 - 503	ND
Fenoxycarb	28 - 2686	ND		Spiromesifen	261 - 2759	ND
Fipronil	63 - 2662	ND		Spirotetramat	303 - 2636	ND
Flonicamid	48 - 2711	ND		Spiroxamine 1	18 - 1160	ND
Fludioxonil	280 - 2710	ND		Spiroxamine 2	25 - 1529	ND
Hexythiazox	43 - 2775	ND		Tebuconazole	319 - 2661	ND
Imazalil	284 - 2704	ND		Thiacloprid	43 - 2682	ND
Imidacloprid	42 - 2724	ND		Thiamethoxam	42 - 2718	ND
Kresoxim-methyl	48 - 2679	ND		Trifloxystrobin	42 - 2738	ND

Final Approval


 Sam Smith
 02May2022
 07:53:00 AM MDT
 PREPARED BY / DATE


 Alex Smith
 02May2022
 12:03:00 PM MDT
 APPROVED BY / DATE

5:1 25mg Orange Mother Liquor

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



<https://results.botanacor.com/api/v1/coas/uuid/e16a785f-cd88-4e7a-bfe3-78a551938ff0>

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Cert #4329.02
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