

Prepared for:

BLUEBIRD BOTANICALS

PO BOX 271724

Louisville, CO USA 80027

10CO-60

Batch ID or Lot Number: 3310494152	Test, Test ID and Methods: Various	Matrix: Solution	Page 1 of 6
Reported: 09May2023	Started: 08May2023	Received: 08May2023	

Cannabinoids - Colorado Compliance


Test ID: T000242980


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

Cannabinoid Analysis

	LOD (mg/mL)	LOQ (mg/mL)	Result (mg/mL)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.063	0.185	0.468	0.50	Density = 0.945g/mL
Cannabichromenic Acid (CBCA)	0.058	0.169	0.356	0.38	
Cannabidiol (CBD)	0.182	0.487	11.030	11.67	
Cannabidiolic Acid (CBDA)	0.187	0.499	8.569	9.07	
Cannabidivarin (CBDV)	0.043	0.115	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.078	0.208	ND	ND	
Cannabigerol (CBG)	0.036	0.105	0.281	0.30	
Cannabigerolic Acid (CBGA)	0.150	0.439	ND	ND	
Cannabinol (CBN)	0.047	0.137	ND	ND	
Cannabinolic Acid (CBNA)	0.102	0.299	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.178	0.522	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.162	0.474	<LOQ	<LOQ	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.144	0.420	ND	ND	
Tetrahydrocannabivarin (THCV)	0.033	0.095	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.127	0.371	ND	ND	
Total Cannabinoids			20.704	21.92	
Total Potential THC			<LOQ	<LOQ	
Total Potential CBD			18.545	19.62	

Final Approval


Sam Smith
09May2023
10:00:00 AM MDT
PREPARED BY / DATE


Karen Winternheimer
09May2023
10:02:00 AM MDT
APPROVED BY / DATE

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Cannabinoids - Colorado Compliance

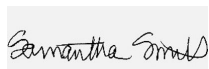
Test ID: T000242979

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

Cannabinoid Analysis

	LOD (mg/mL)	LOQ (mg/mL)	Result (mg/mL)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.064	0.187	0.456	0.48	Density = 0.945g/mL
Cannabichromenic Acid (CBCA)	0.058	0.171	0.337	0.36	
Cannabidiol (CBD)	0.185	0.493	10.805	11.43	
Cannabidiolic Acid (CBDA)	0.190	0.505	8.395	8.88	
Cannabidivarin (CBDV)	0.044	0.117	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.079	0.211	ND	ND	
Cannabigerol (CBG)	0.036	0.106	0.276	0.29	
Cannabigerolic Acid (CBGA)	0.152	0.444	ND	ND	
Cannabinol (CBN)	0.047	0.139	ND	ND	
Cannabinolic Acid (CBNA)	0.103	0.303	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.181	0.529	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.164	0.480	<LOQ	<LOQ	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.145	0.426	ND	ND	
Tetrahydrocannabivarin (THCV)	0.033	0.097	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.128	0.375	ND	ND	
Total Cannabinoids			20.269	21.44	
Total Potential THC			<LOQ	<LOQ	
Total Potential CBD			18.167	19.22	

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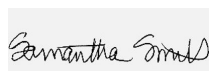
Residual Solvents - Colorado Compliance

Test ID: T000242984

Methods: TM04 (GC-MS): Residual

Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	76 - 1515	ND	
Butanes (Isobutane, n-Butane)	162 - 3238	ND	
Methanol	49 - 987	ND	
Pentane	88 - 1751	ND	
Ethanol	82 - 1641	ND	
Acetone	79 - 1582	ND	
Isopropyl Alcohol	79 - 1583	ND	
Hexane	5 - 100	ND	
Ethyl Acetate	80 - 1592	ND	
Benzene	0.2 - 3.2	ND	
Heptanes	80 - 1593	ND	
Toluene	14 - 289	ND	
Xylenes (m,p,o-Xylenes)	105 - 2097	ND	

Final Approval



Sam Smith
09May2023
03:33:00 PM MDT

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APPROVED BY / DATE

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09May2023
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Heavy Metals - Colorado Compliance

Test ID: T000242983

Methods: TM19 (ICP-MS): Heavy

Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.05 - 4.62	ND	
Cadmium	0.05 - 4.93	ND	
Mercury	0.05 - 4.90	ND	
Lead	0.01 - 1.41	ND	

Final Approval



Sam Smith
10May2023
01:28:00 PM MDT

PREPARED BY / DATE



Karen Winternheimer
10May2023
01:37:00 PM MDT

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Mycotoxins - Colorado Compliance

Test ID: T000242985

Methods: TM18 (UHPLC-QQQ

LCMS/MS): Mycotoxins

LCMS/MS): Mycotoxins	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	3.68 - 123.86	ND	N/A
Aflatoxin B1	1.03 - 32.53	ND	
Aflatoxin B2	0.97 - 32.34	ND	
Aflatoxin G1	1.16 - 32.24	ND	
Aflatoxin G2	1.13 - 32.59	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	

Final Approval



Sam Smith
10May2023
03:13:00 PM MDT

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Karen Winternheimer
10May2023
03:15:00 PM MDT

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Pesticides

Test ID: T000242981

Methods: TM17

(LC-QQ LC MS/MS)

Dynamic Range (ppb)

Result (ppb)

Abamectin	378 - 2769	ND
Acephate	43 - 2754	ND
Acetamiprid	40 - 2768	ND
Azoxystrobin	42 - 2784	ND
Bifenazate	40 - 2782	ND
Boscalid	42 - 2628	ND
Carbaryl	43 - 2760	ND
Carbofuran	43 - 2732	ND
Chlorantraniliprole	43 - 2646	ND
Chlorpyrifos	44 - 2784	ND
Clofentezine	275 - 2759	ND
Diazinon	292 - 2802	ND
Dichlorvos	285 - 2827	ND
Dimethoate	40 - 2771	ND
E-Fenpyroximate	306 - 2809	ND
Etofenprox	42 - 2769	ND
Etoxazole	318 - 2742	ND
Fenoxycarb	28 - 2816	ND
Fipronil	66 - 2797	ND
Flonicamid	46 - 2843	ND
Fludioxonil	302 - 2682	ND
Hexythiazox	41 - 2779	ND
Imazalil	277 - 2819	ND
Imidacloprid	45 - 2816	ND
Kresoxim-methyl	38 - 2811	ND

Dynamic Range (ppb)

Result (ppb)

Malathion	287 - 2799	ND
Metalaxyl	38 - 2811	ND
Methiocarb	44 - 2678	ND
Methomyl	40 - 2805	ND
MGK 264 1	168 - 1670	ND
MGK 264 2	112 - 1086	ND
Myclobutanil	40 - 2671	ND
Naled	45 - 2772	ND
Oxamyl	41 - 2799	ND
Paclobutrazol	43 - 2746	ND
Permethrin	293 - 2838	ND
Phosmet	40 - 2782	ND
Prophos	299 - 2688	ND
Propoxur	43 - 2750	ND
Pyridaben	316 - 2744	ND
Spinosad A	32 - 2092	ND
Spinosad D	66 - 670	ND
Spiromesifen	293 - 2785	ND
Spirotetramat	287 - 2858	ND
Spiroxamine 1	18 - 1197	ND
Spiroxamine 2	25 - 1510	ND
Tebuconazole	288 - 2788	ND
Thiacloprid	41 - 2742	ND
Thiamethoxam	39 - 2800	ND
Trifloxystrobin	42 - 2727	ND

Final Approval



Karen Winternheimer

11May2023

10:16:00 AM MDT

PREPARED BY / DATE



Sam Smith

11May2023

10:25:00 AM MDT

APPROVED BY / DATE

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Microbial Contaminants - Colorado Compliance

Test ID: T000242982

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



Brett Hudson
11May2023
01:49:00 PM MDT



Eden Thompson-Wright
11May2023
01:55:00 PM MDT

PREPARED BY / DATE

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/72e038dc-1d8e-45fc-be83-c0d94ea74370>

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 SC Laboratories, Inc., in the condition it was received. 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. This report may not be reproduced, except in full, without the written approval of SC Laboratories, Inc. 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](#).



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