

Prepared for:
Bent Paddle Brewing Co
1912 W Michigan St.
Duluth, MN USA 55806

CBD+ POG

Batch ID or Lot Number: 121123-POG	Test: Potency	Reported: 14Dec2023	USDA License: N/A
Matrix: Unit	Test ID: T000264911	Started: 13Dec2023	Sampler ID: N/A
	Method(s): TM14 (HPLC-DAD)	Received: 13Dec2023	Status: N/A

Cannabinoids

	LOD (mg)	LOQ (mg)	Result (mg)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.151	0.505	ND	ND	# of Servings = 1, Sample Weight=355g
Cannabichromenic Acid (CBCA)	0.138	0.462	ND	ND	
Cannabidiol (CBD)	0.431	1.276	26.190	0.10	
Cannabidiolic Acid (CBDA)	0.442	1.309	ND	ND	
Cannabidivarin (CBDV)	0.102	0.302	0.530	0.00	
Cannabidivarinic Acid (CBDVA)	0.185	0.546	ND	ND	
Cannabigerol (CBG)	0.086	0.287	2.350	0.00	
Cannabigerolic Acid (CBGA)	0.358	1.199	ND	ND	
Cannabinol (CBN)	0.112	0.374	<LOQ	<LOQ	
Cannabinolic Acid (CBNA)	0.244	0.818	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.426	1.429	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.387	1.297	2.020	0.00	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.343	1.149	ND	ND	
Tetrahydrocannabivarin (THCV)	0.078	0.261	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.302	1.014	ND	ND	
Total Cannabinoids			31.090	0.10	
Total Potential THC			2.020	0.00	
Total Potential CBD			26.190	0.10	

Final Approval



Karen Winternheimer
14Dec2023
01:26:00 PM MST

PREPARED BY / DATE



Sam Smith
14Dec2023
01:27:00 PM MST

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/0e088529-39bc-4f45-a361-046a7ce4f23f>

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)).

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 A2LA Cert #: 4329.02 Chemical; 4329.03 Biological.



Cert #4329.02
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Microbial Contaminants

Test ID: T000264338

Methods: TM25 (PCR) TM24, TM26, TM27 (Culture Plating)

	Method	LOD	Quantitation Range	Result	Notes
STEC	TM25: PCR	10 ⁰ CFU/25g	NA	Absent	Free from visual mold, mildew, and foreign matter
<i>Salmonella</i>	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 11Dec2023 10:06:00 AM MST	 Brett Hudson 11Dec2023 10:57:00 AM MST
PREPARED BY / DATE	APPROVED BY / DATE

Heavy Metals

Test ID: T000264339

Methods: TM19 (ICP-MS): Heavy

Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.04 - 4.38	ND	
Cadmium	0.04 - 4.34	ND	
Mercury	0.04 - 4.37	ND	
Lead	0.05 - 4.62	ND	

Final Approval

 Sam Smith 11Dec2023 02:43:00 PM MST	 Karen Winternheimer 11Dec2023 02:48:00 PM MST
PREPARED BY / DATE	APPROVED BY / DATE

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Pesticides


Test ID: T000264337

Methods: TM17

(LC-QQ LC MS/MS)	Dynamic Range (ppb)	Result (ppb)		Dynamic Range (ppb)	Result (ppb)	
Abamectin	369 - 2756	ND		Malathion	300 - 2705	ND
Acephate	40 - 2759	ND		Metalaxyl	42 - 2722	ND
Acetamiprid	43 - 2717	ND		Methiocarb	38 - 2766	ND
Azoxystrobin	45 - 2715	ND		Methomyl	41 - 2793	ND
Bifenazate	38 - 2712	ND		MGK 264 1	156 - 1616	ND
Boscalid	46 - 2722	ND		MGK 264 2	109 - 1091	ND
Carbaryl	43 - 2699	ND		Myclobutanil	52 - 2695	ND
Carbofuran	45 - 2694	ND		Naled	48 - 2703	ND
Chlorantraniliprole	43 - 2754	ND		Oxamyl	42 - 2788	ND
Chlorpyrifos	29 - 2786	ND		Paclobutrazol	41 - 2700	ND
Clofentezine	291 - 2740	ND		Permethrin	299 - 2784	ND
Diazinon	288 - 2718	ND		Phosmet	42 - 2607	ND
Dichlorvos	276 - 2755	ND		Prophos	295 - 2755	ND
Dimethoate	41 - 2731	ND		Propoxur	44 - 2707	ND
E-Fenpyroximate	292 - 2790	ND		Pyridaben	310 - 2748	ND
Etofenprox	43 - 2761	ND		Spinosad A	34 - 2090	ND
Etoxazole	290 - 2679	ND		Spinosad D	73 - 669	ND
Fenoxycarb	22 - 2752	ND		Spiromesifen	248 - 2750	ND
Fipronil	53 - 2782	ND		Spirotetramat	282 - 2756	ND
Flonicamid	45 - 2796	ND		Spiroxamine 1	16 - 1022	ND
Fludioxonil	302 - 2692	ND		Spiroxamine 2	24 - 1608	ND
Hexythiazox	40 - 2782	ND		Tebuconazole	297 - 2700	ND
Imazalil	264 - 2756	ND		Thiacloprid	43 - 2749	ND
Imidacloprid	40 - 2801	ND		Thiamethoxam	44 - 2773	ND
Kresoxim-methyl	41 - 2740	ND		Trifloxystrobin	46 - 2713	ND

Final Approval


Karen Winternheimer
13Dec2023
09:05:00 AM MST
PREPARED BY / DATE


Sam Smith
13Dec2023
09:07:00 AM MST
APPROVED BY / DATE

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<https://results.botanacor.com/api/v1/coas/uuid/205935dd-a522-460f-83da-9296ae66a734>

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.

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