

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

## CBD+ POG

Batch ID or Lot Number: <b>041024-POG</b>	Test: <b>Potency</b>	Reported: <b>09Apr2024</b>	USDA License: N/A
Matrix: Unit	Test ID: T000276986	Started: 09Apr2024	Sampler ID: N/A
	Method(s): TM14 (HPLC-DAD)	Received: 09Apr2024	Status: N/A

## Cannabinoids

	LOD (mg)	LOQ (mg)	Result (mg)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.152	0.431	0.490	0.00	# of Servings = 1, Sample Weight=355g
Cannabichromenic Acid (CBCA)	0.139	0.394	ND	ND	
Cannabidiol (CBD)	0.421	1.224	27.490	0.10	
Cannabidiolic Acid (CBDA)	0.432	1.255	ND	ND	
Cannabidivarin (CBDV)	0.100	0.289	0.650	0.00	
Cannabidivarinic Acid (CBDVA)	0.180	0.524	ND	ND	
Cannabigerol (CBG)	0.086	0.245	ND	ND	
Cannabigerolic Acid (CBGA)	0.360	1.023	ND	ND	
Cannabinol (CBN)	0.112	0.319	ND	ND	
Cannabinolic Acid (CBNA)	0.245	0.698	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.428	1.219	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.389	1.107	2.180	0.00	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.345	0.981	ND	ND	
Tetrahydrocannabivarin (THCV)	0.078	0.223	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.304	0.865	ND	ND	
<b>Total Cannabinoids</b>			<b>30.810</b>	<b>0.10</b>	
Total Potential THC			2.180	0.00	
Total Potential CBD			27.490	0.10	

## Final Approval



Karen Winternheimer  
09Apr2024  
02:11:00 PM MDT

PREPARED BY / DATE



Phillip Travisano  
09Apr2024  
02:16:00 PM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/aec5f4d3-c41a-457e-bd16-5f47e50b4c22>

**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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**Bent Paddle Brewing Co**  
1912 W Michigan St.  
Duluth, MN USA 55806

## CBD+ POG

Batch ID or Lot Number: <b>041124-POG</b>	Test, Test ID and Methods: Various	Matrix: Unit	Page 2 of 4
Reported: <b>05Apr2024</b>	Started: 04Apr2024	Received: 05Apr2024	

## Microbial Contaminants

Test ID: T000276638

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

	Method	LOD	Quantitation Range	Result	Notes
STEC	TM25: PCR	10 <sup>0</sup> CFU/25g	NA	Absent	Free from visual mold, mildew, and foreign matter
<i>Salmonella</i>	TM25: PCR	10 <sup>0</sup> CFU/25g	NA	Absent	
Total Yeast and Mold*	TM24: Culture Plating	10 <sup>1</sup> CFU/g	1.0x10 <sup>2</sup> - 1.5x10 <sup>4</sup>	None Detected	
Total Aerobic Count*	TM26: Culture Plating	10 <sup>2</sup> CFU/g	1.0x10 <sup>3</sup> - 1.5x10 <sup>5</sup>	None Detected	
Total Coliforms*	TM27: Culture Plating	10 <sup>1</sup> CFU/g	1.0x10 <sup>2</sup> - 1.5x10 <sup>4</sup>	None Detected	

### Final Approval



Brett Hudson  
08Apr2024  
01:55:00 PM MDT



Brianne Maillot  
08Apr2024  
04:43:00 PM MDT

PREPARED BY / DATE

APPROVED BY / DATE

## Heavy Metals

Test ID: T000276639

Methods: TM19 (ICP-MS): Heavy

Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.05 - 4.80	ND	
Cadmium	0.05 - 4.75	ND	
Mercury	0.05 - 4.77	ND	
Lead	0.05 - 4.74	ND	

### Final Approval



Phillip Travisano  
10Apr2024  
03:28:00 PM MDT



Karen Winternheimer  
10Apr2024  
03:42:00 PM MDT

PREPARED BY / DATE

APPROVED BY / DATE

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## CBD+ POG

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## Pesticides

Test ID: T000276637

Methods: TM17

(LC-QQ LC MS/MS)	Dynamic Range (ppb)	Result (ppb)		Dynamic Range (ppb)	Result (ppb)	
Abamectin	331 - 2717	ND		Malathion	280 - 2768	ND
Acephate	43 - 2748	ND		Metalaxyl	40 - 2783	ND
Acetamiprid	38 - 2715	ND		Methiocarb	40 - 2784	ND
Azoxystrobin	46 - 2786	ND		Methomyl	40 - 2746	ND
Bifenazate	40 - 2781	ND		MGK 264 1	164 - 1619	ND
Boscalid	46 - 2784	ND		MGK 264 2	106 - 1080	ND
Carbaryl	38 - 2690	ND		Myclobutanil	35 - 2730	ND
Carbofuran	41 - 2691	ND		Naled	48 - 2653	ND
Chlorantraniliprole	47 - 2782	ND		Oxamyl	40 - 2770	ND
Chlorpyrifos	53 - 2669	ND		Paclobutrazol	43 - 2666	ND
Clofentezine	288 - 2722	ND		Permethrin	292 - 2753	ND
Diazinon	290 - 2777	ND		Phosmet	41 - 2632	ND
Dichlorvos	270 - 2736	ND		Prophos	299 - 2777	ND
Dimethoate	39 - 2708	ND		Propoxur	42 - 2704	ND
E-Fenpyroximate	298 - 2760	ND		Pyridaben	314 - 2775	ND
Etofenprox	42 - 2715	ND		Spinosad A	32 - 2090	ND
Etoxazole	302 - 2657	ND		Spinosad D	68 - 670	ND
Fenoxycarb	39 - 2773	ND		Spiromesifen	287 - 2722	ND
Fipronil	40 - 2735	ND		Spirotetramat	295 - 2839	ND
Flonicamid	45 - 2735	ND		Spiroxamine 1	14 - 1067	ND
Fludioxonil	278 - 2757	ND		Spiroxamine 2	23 - 1614	ND
Hexythiazox	38 - 2756	ND		Tebuconazole	300 - 2775	ND
Imazalil	266 - 2815	ND		Thiacloprid	41 - 2721	ND
Imidacloprid	37 - 2768	ND		Thiamethoxam	40 - 2764	ND
Kresoxim-methyl	42 - 2791	ND		Trifloxystrobin	42 - 2704	ND

## Final Approval

  
Karen Winternheimer  
17Apr2024  
10:29:00 AM MDT  
PREPARED BY / DATE

  
Phillip Travisano  
17Apr2024  
10:31:00 AM MDT  
APPROVED BY / DATE

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## CBD+ POG

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<https://results.botanacor.com/api/v1/coas/uuid/9ce2707d-0b5e-4953-a4a8-f609bf38c48a>

**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<sup>2</sup> = 100 CFU, 10<sup>3</sup> = 1,000 CFU, 10<sup>4</sup> = 10,000 CFU, 10<sup>5</sup> = 100,000 CFU.

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