

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


## CBD+ POG


Batch ID or Lot Number: <b>081623-POG</b>	Test: <b>Potency</b>	Reported: <b>17Aug2023</b>	USDA License: N/A
Matrix: Unit	Test ID: T000253290	Started: 17Aug2023	Sampler ID: N/A
	Method(s): TM14 (HPLC-DAD)	Received: 17Aug2023	Status: N/A

## Cannabinoids

	LOD (mg)	LOQ (mg)	Result (mg)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.214	0.488	0.820	0.00	# of Servings = 1, Sample Weight=355g
Cannabichromenic Acid (CBCA)	0.195	0.447	ND	ND	
Cannabidiol (CBD)	0.585	1.356	28.850	0.10	
Cannabidiolic Acid (CBDA)	0.600	1.391	ND	ND	
Cannabidivarin (CBDV)	0.138	0.321	<LOQ	<LOQ	
Cannabidivarinic Acid (CBDVA)	0.250	0.580	ND	ND	
Cannabigerol (CBG)	0.121	0.277	0.310	0.00	
Cannabigerolic Acid (CBGA)	0.507	1.159	ND	ND	
Cannabinol (CBN)	0.158	0.362	ND	ND	
Cannabinolic Acid (CBNA)	0.346	0.791	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.604	1.381	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.549	1.254	2.530	0.00	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.486	1.111	ND	ND	
Tetrahydrocannabivarin (THCV)	0.110	0.252	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.429	0.980	ND	ND	
<b>Total Cannabinoids</b>			<b>32.510</b>	<b>0.10</b>	
Total Potential THC			2.530	0.00	
Total Potential CBD			28.850	0.10	

## Final Approval

  
PREPARED BY / DATE  
Sam Smith  
17Aug2023  
03:57:00 PM MDT

  
APPROVED BY / DATE  
Karen Winternheimer  
17Aug2023  
04:00:00 PM MDT



<https://results.botanacor.com/api/v1/coas/uuid/3684e3c2-01ee-49c6-b13f-1f83fe694204>

**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 Accredited by A2LA.



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3684e3c201ee49c6b13f1f83fe694204.1

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

## 081623 -POG

Batch ID or Lot Number: <b>081623 -POG</b>	Test: <b>Pesticides</b>	Reported: <b>18Aug2023</b>	USDA License: NA
Matrix: Finished Product	Test ID: T000252971	Started: 17Aug2023	Sampler ID: NA
	Method(s): TM17 (LC-QQ LC MS/MS)	Received: 15Aug2023	Status: NA

Pesticides	Dynamic Range (ppb)	Result (ppb)	Pesticides	Dynamic Range (ppb)	Result (ppb)
Abamectin	202 - 2627	ND	Malathion	282 - 2763	ND
Acephate	44 - 2777	ND	Metalaxyl	44 - 2750	ND
Acetamiprid	41 - 2668	ND	Methiocarb	45 - 2694	ND
Azoxystrobin	45 - 2726	ND	Methomyl	41 - 2701	ND
Bifenazate	43 - 2720	ND	MGK 264 1	174 - 1643	ND
Boscalid	44 - 2702	ND	MGK 264 2	105 - 1078	ND
Carbaryl	39 - 2721	ND	Myclobutanil	54 - 2664	ND
Carbofuran	42 - 2717	ND	Naled	45 - 2741	ND
Chlorantraniliprole	43 - 2673	ND	Oxamyl	43 - 2702	ND
Chlorpyrifos	47 - 2827	ND	Pacllobutrazol	45 - 2714	ND
Clofentezine	276 - 2738	ND	Permethrin	285 - 2790	ND
Diazinon	286 - 2754	ND	Phosmet	40 - 2734	ND
Dichlorvos	273 - 2719	ND	Prophos	294 - 2642	ND
Dimethoate	42 - 2677	ND	Propoxur	41 - 2700	ND
E-Fenpyroximate	293 - 2807	ND	Pyridaben	296 - 2749	ND
Etofenprox	42 - 2713	ND	Spinosad A	32 - 2098	ND
Etoxazole	292 - 2764	ND	Spinosad D	63 - 686	ND
Fenoxycarb	41 - 2710	ND	Spiromesifen	278 - 2783	ND
Fipronil	75 - 2626	ND	Spirotetramat	283 - 2754	ND
Flonicamid	48 - 2664	ND	Spiroxamine 1	17 - 1139	ND
Fludioxonil	307 - 2676	ND	Spiroxamine 2	21 - 1531	ND
Hexythiazox	40 - 2769	ND	Tebuconazole	289 - 2738	ND
Imazalil	271 - 2791	ND	Thiacloprid	44 - 2650	ND
Imidacloprid	51 - 2714	ND	Thiamethoxam	43 - 2706	ND
Kresoxim-methyl	47 - 2741	ND	Trifloxystrobin	44 - 2695	ND

## Final Approval



Karen Winternheimer  
18Aug2023  
11:06:00 AM MDT

PREPARED BY / DATE



Sam Smith  
18Aug2023  
11:10:00 AM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/02c20c47-dcb6-484b-85b1-2ee51567e6d2>

### Definitions

ND = None Detected (defined by dynamic range of the method)  
Dynamic Range = Limit of Quantitation (LOQ) through Upper Limit of Method Range  
ppb = Parts Per Billion

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## 081623 -POG

Batch ID or Lot Number: <b>081623 -POG</b>	Test: <b>Microbial Contaminants</b>	Reported: <b>18Aug2023</b>	USDA License: NA
Matrix: Finished Product	Test ID: T000252972	Started: 15Aug2023	Sampler ID: NA
	Method(s): TM25 (PCR) TM24, TM26, TM27 (Culture Plating)	Received: 15Aug2023	Status: NA

## Microbial Contaminants

Contaminants	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



Eden Thompson-Wright  
18Aug2023  
09:57:00 AM MDT

PREPARED BY / DATE



Brianne Maillot  
18Aug2023  
12:24:00 PM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/c6a3dcb8-fec3-47db-904f-d6d1316717e6>

### Definitions

\* 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  
CFU/g = Colony Forming Units per Gram, LOD = Limit of Detection  
ULOQ = Upper Limit of Quantitation, LLOQ = Lower Limit of Quantitation  
STEC = Shiga Toxin-Producing E. coli

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Duluth, MN USA 55806

## 081623 -POG

Batch ID or Lot Number: <b>081623 -POG</b>	Test: <b>Heavy Metals</b>	Reported: <b>21Aug2023</b>	USDA License: NA
Matrix: Finished Product	Test ID: T000252973	Started: 21Aug2023	Sampler ID: NA
	Method(s): TM19 (ICP-MS): Heavy Metals	Received: 15Aug2023	Status: NA

Heavy Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.04 - 4.26	ND	
Cadmium	0.05 - 5.22	ND	
Mercury	0.04 - 4.45	ND	
Lead	0.05 - 5.12	ND	

## Final Approval



Sam Smith  
21Aug2023  
01:53:00 PM MDT

PREPARED BY / DATE



Karen Winternheimer  
21Aug2023  
05:11:00 PM MDT

APPROVED BY / DATE



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### Definitions

ND = None Detected (defined by dynamic range of the method)  
Dynamic Range = Limit of Quantitation (LOQ) through Upper Limit of Method Range

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