

# CERTIFICATE OF ANALYSIS

Prepared for:

## **Bent Paddle Brewing Co**

1912 W Michigan St. Duluth, MN USA 55806

#### **Puff - Dragonfruit Pineapple** Batch ID or Lot Number: Test: Reported: USDA License: 111323-PUFF Potency 20Nov2023 N/A Matrix: Test ID: Started: Sampler ID: Unit T000261885 13Nov2023 N/A Status: Method(s): Received: TM14 (HPLC-DAD) 14Nov2023 N/A

Cannabinoids	LOD (mg)	<b>LOQ</b> (mg)	Result (mg)	<b>Result</b> (mg/g)	Notes
Cannabichromene (CBC)	0.154	0.542	ND	ND	Amendment to
Cannabichromenic Acid (CBCA)	0.141	0.496	ND	ND	T000261885 issued
Cannabidiol (CBD)	0.492	1.177	ND	ND	on 14Nov2023 to
Cannabidiolic Acid (CBDA)	0.504	1.207	ND	ND	correct the batch ID.
Cannabidivarin (CBDV)	0.116	0.278	ND	ND	# of Servings = 1,
Cannabidivarinic Acid (CBDVA)	0.210	0.503	ND	ND	Sample
Cannabigerol (CBG)	0.088	0.308	<loq< td=""><td><loq< td=""><td>Weight=355g</td></loq<></td></loq<>	<loq< td=""><td>Weight=355g</td></loq<>	Weight=355g
Cannabigerolic Acid (CBGA)	0.366	1.287	ND	ND	
Cannabinol (CBN)	0.114	0.402	ND	ND	
Cannabinolic Acid (CBNA)	0.250	0.878	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.437	1.533	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.397	1.392	10.060	0.00	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.351	1.233	ND	ND	
Tetrahydrocannabivarin (THCV)	0.080	0.280	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.310	1.088	ND	ND	-
Total Cannabinoids			10.060	0.00	
Total Potential THC			10.060	0.00	
Total Potential CBD			ND	ND	

## **Final Approval**

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PREPARED BY / DATE

Karen Winternheimer 20Nov2023 01:57:00 PM MST

amantha ma

Sam Smith 20Nov2023 02:01:00 PM MST



APPROVED BY / DATE

https://results.botanacor.com/api/v1/coas/uuid/664a9c88-360e-4d3a-b32b-8a20ee9f6d86

#### 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.





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## **Bent Paddle Brewing Co**

1912 W Michigan St. Duluth, MN USA 55806

Puff - Dragonfruit Pineapple		Duluth, MN USA 55806		
Batch ID or Lot Number: 111323-Puff	Test, Test ID and Methods: Various	Matrix: Unit	Page 2 of 4	
Reported: 10Nov2023	Started: 10Nov2023	Received: 10Nov2023		

## Microbial **Contaminants**

Test ID: T000261691 Methods: TM25 (PCR) TM24, TM26,			Quantitation		
TM27 (Culture Plating)	Method	LOD	Range	Result	Notes
STEC	TM25: PCR	10 <sup>0</sup> CFU/25g	NA	Absent	Free from visual mold, mildew, an
Salmonella	TM25: PCR	10 <sup>0</sup> CFU/25g	NA	Absent	– foreign matter
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 13Nov2023 02:47:00 PM MST

Brianne Maillot Buanne Maillot 13Nov2023 04:22:00 PM MST

PREPARED BY / DATE

APPROVED BY / DATE



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## **Bent Paddle Brewing Co**

1912 W Michigan St. Duluth, MN USA 55806

Puff - Dragonfruit Pineapple		Duluth, MN USA 55806		
Batch ID or Lot Number: 111323-Puff	Test, Test ID and Methods: Various	Matrix: Unit	Page 3 of 4	
Reported: <b>10Nov2023</b>	Started: 10Nov2023	Received: 10Nov2023		

### Pesticides

Methods: TM17

Test ID: T000261690

(LC-QQ LC MS/MS)	<b>Dynamic Range</b> (ppb)	Result (ppb)	
Abamectin	320 - 2657	ND	Malathion
Acephate	40 - 2714	ND	Metalaxyl
Acetamiprid	42 - 2674	ND	Methiocarb
Azoxystrobin	44 - 2736	ND	Methomyl
Bifenazate	40 - 2717	ND	MGK 264 1
Boscalid	39 - 2668	ND	MGK 264 2
Carbaryl	40 - 2700	ND	Myclobutanil
Carbofuran	46 - 2701	ND	Naled
Chlorantraniliprole	44 - 2691	ND	Oxamyl
Chlorpyrifos	43 - 2693	ND	Paclobutrazol
Clofentezine	291 - 2692	ND	Permethrin
Diazinon	289 - 2731	ND	Phosmet
Dichlorvos	290 - 2635	ND	Prophos
Dimethoate	41 - 2692	ND	Propoxur
E-Fenpyroximate	282 - 2759	ND	Pyridaben
Etofenprox	45 - 2729	ND	Spinosad A
Etoxazole	284 - 2668	ND	Spinosad D
Fenoxycarb	45 - 2740	ND	Spiromesifen
Fipronil	52 - 2898	ND	Spirotetramat
Flonicamid	45 - 2724	ND	Spiroxamine 1
Fludioxonil	266 - 2671	ND	Spiroxamine 2
Hexythiazox	42 - 2775	ND	Tebuconazole
Imazalil	278 - 2740	ND	Thiacloprid
Imidacloprid	38 - 2748	ND	Thiamethoxam
Kresoxim-methyl	44 - 2717	ND	Trifloxystrobin

	<b>Dynamic Range</b> (ppb)	Result (ppb)
Malathion	291 - 2732	ND
Metalaxyl	40 - 2717	ND
Methiocarb	42 - 2689	ND
Methomyl	40 - 2733	ND
MGK 264 1	152 - 1642	ND
MGK 264 2	107 - 1082	ND
Myclobutanil	66 - 2662	ND
Naled	48 - 2655	ND
Oxamyl	41 - 2730	ND
Paclobutrazol	40 - 2694	ND
Permethrin	286 - 2771	ND
Phosmet	42 - 2611	ND
Prophos	262 - 2694	ND
Propoxur	45 - 2660	ND
Pyridaben	286 - 2751	ND
Spinosad A	32 - 2077	ND
Spinosad D	68 - 682	ND
Spiromesifen	285 - 2744	ND
Spirotetramat	283 - 2778	ND
Spiroxamine 1	15 - 1008	ND
Spiroxamine 2	23 - 1592	ND
Tebuconazole	288 - 2759	ND
Thiacloprid	42 - 2695	ND
Thiamethoxam	43 - 2737	ND
Trifloxystrobin	46 - 2716	ND

### **Final Approval**



Karen Winternheimer 16Nov2023 Mternheimer 10:22:00 AM MST

Sam Smith Samantha Smith 16Nov2023 10:26:00 AM MST

APPROVED BY / DATE

PREPARED BY / DATE



**Puff - Dragonfruit Pineapple** 

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1912 W Michigan St. Duluth, MN USA 55806

	1- 1		
Batch ID or Lot Number:	Test, Test ID and Methods:	Matrix:	Page 4 of 4
111323-Puff	Various	Unit	
Reported:	Started:	Received:	
10Nov2023	10Nov2023	10Nov2023	

### **Heavy Metals**

Test ID: T000261692			
Methods: TM19 (ICP-MS): Heavy			
Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.05 - 4.65	ND	
Cadmium	0.05 - 5.03	ND	
Mercury	0.05 - 4.80	ND	
Lead	0.05 - 4.66	ND	

Karen Winternheimer

17Nov2023

### **Final Approval**

Sam Smith Samantha Smoth 17Nov2023 07:29:00 AM MST PREPARED BY / DATE

Waternheimer 07:31:00 AM MST

APPROVED BY / DATE

https://results.botanacor.com/api/v1/coas/uuid/2b8b25fd-5a89-4418-aa8a-76e43dc406f0

#### 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:  $10^2 = 100$  CFU,  $10^3 = 1,000$  CFU,  $10^4 = 10,000$  CFU,  $10^5 = 100,000$  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 A2LA Cert #: 4329.02 Chemical; 4329.03 Biological. 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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