

**Puff - Dragon Fruit Pineapple** 

# CERTIFICATE OF ANALYSIS

Prepared for:

## **Bent Paddle Brewing Co**

1912 W Michigan St. Duluth, MN USA 55806

Batch ID or Lot Number:	Test, Test ID and Methods:	Matrix:	Page 1 of 4	
040222	Variaus	l locite	6	
040323	Various	Unit		
Reported:	Started:	Received:		
04Apr2023	04Apr2023	04Apr2023		
047012025	047012025	0-1Api 2025		

#### Cannabinoids

Methods: TM14 (HPLC-DAD)	LOD (mg)	<b>LOQ</b> (mg)	Result (mg)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.161	0.515	ND	ND	# of Servings = 1
Cannabichromenic Acid (CBCA)	0.148	0.471	ND	ND	Sample
Cannabidiol (CBD)	0.446	1.294	ND	ND	Weight=355g
Cannabidiolic Acid (CBDA)	0.458	1.327	ND	ND	
Cannabidivarin (CBDV)	0.106	0.306	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.191	0.554	ND	ND	
Cannabigerol (CBG)	0.092	0.292	<loq< td=""><td><loq< td=""><td></td></loq<></td></loq<>	<loq< td=""><td></td></loq<>	
Cannabigerolic Acid (CBGA)	0.383	1.222	ND	ND	
Cannabinol (CBN)	0.119	0.381	<loq< td=""><td><loq< td=""><td></td></loq<></td></loq<>	<loq< td=""><td></td></loq<>	
Cannabinolic Acid (CBNA)	0.261	0.834	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.456	1.456	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.414	1.322	9.620	0.00	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.367	1.171	ND	ND	
Tetrahydrocannabivarin (THCV)	0.083	0.266	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.324	1.033	ND	ND	
Total Cannabinoids			9.620	0.00	
Total Potential THC			9.620	0.00	
Total Potential CBD			ND	ND	

#### **Final Approval**

Samantha Smoll 04Apr2023 12:54:00 PM MDT

Sam Smith

PREPARED BY / DATE

Karen Winternheimer Wittenheimen 04Apr2023 12:59:00 PM MDT

APPROVED BY / DATE



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## **Bent Paddle Brewing Co**

1912 W Michigan St. Duluth, MN USA 55806

Puff - Dragon Fruit Pineapple		Duluth, MN USA 55806		
Batch ID or Lot Number: <b>040323</b>	Test, Test ID and Methods: Various	Matrix: Unit	Page 2 of 4	
Reported: <b>04Apr2023</b>	Started: 04Apr2023	Received: 04Apr2023		

### **Pesticides**

Test ID: T000240451 Methods: TM17

(LC-QQ LC MS/MS)	<b>Dynamic Range</b> (ppb)	Result (ppb)		<b>Dynamic Range</b> (ppb)	<b>Result</b> (ppb
Abamectin	382 - 2811	ND	Malathion	293 - 2714	ND
Acephate	37 - 2762	ND	Metalaxyl	43 - 2733	ND
Acetamiprid	42 - 2735	ND	Methiocarb	42 - 2732	ND
Azoxystrobin	42 - 2738	ND	Methomyl	40 - 2755	ND
Bifenazate	40 - 2715	ND	MGK 264 1	168 - 1617	ND
Boscalid	43 - 2784	ND	MGK 264 2	134 - 1131	ND
Carbaryl	42 - 2710	ND	Myclobutanil	48 - 2792	ND
Carbofuran	43 - 2720	ND	Naled	49 - 2788	ND
Chlorantraniliprole	37 - 2746	ND	Oxamyl	40 - 2775	ND
Chlorpyrifos	46 - 2778	ND	Paclobutrazol	46 - 2721	ND
Clofentezine	269 - 2773	ND	Permethrin	306 - 2775	ND
Diazinon	282 - 2754	ND	Phosmet	41 - 2765	ND
Dichlorvos	296 - 2724	ND	Prophos	289 - 2725	ND
Dimethoate	43 - 2747	ND	Propoxur	41 - 2729	ND
E-Fenpyroximate	291 - 2794	ND	Pyridaben	300 - 2826	ND
Etofenprox	43 - 2836	ND	Spinosad A	34 - 2246	ND
Etoxazole	294 - 2770	ND	Spinosad D	50 - 512	ND
Fenoxycarb	39 - 2742	ND	Spiromesifen	266 - 2783	ND
Fipronil	35 - 2930	ND	Spirotetramat	274 - 2762	ND
Flonicamid	47 - 2779	ND	Spiroxamine 1	18 - 1189	ND
Fludioxonil	277 - 2816	ND	Spiroxamine 2	25 - 1577	ND
Hexythiazox	44 - 2808	ND	Tebuconazole	283 - 2715	ND
Imazalil	279 - 2726	ND	Thiacloprid	44 - 2755	ND
Imidacloprid	48 - 2748	ND	Thiamethoxam	43 - 2798	ND
Kresoxim-methyl	25 - 2800	ND	Trifloxystrobin	43 - 2770	ND

### **Final Approval**



Karen Winternheimer 07Apr2023 Muternheimer 11:15:00 AM MDT

Sam Smith Samantha Smith 07Apr2023 11:22:00 AM MDT

APPROVED BY / DATE



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Puff - Dragon Fruit Pineapple		Duluth,	MN USA 55806
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040323	Various	Unit	
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04Apr2023	04Apr2023	04Apr2023	

### Microbial **Contaminants**

		Ouantitation		
Method	LOD	Range	Result	Notes
TM25: PCR	10 <sup>0</sup> CFU/25g	NA	Absent	Free from visual mold, mildew, and foreign matter
TM25: PCR	10 <sup>0</sup> CFU/25g	NA	Absent	- Toreign matter
TM24: Culture Plating	10 <sup>1</sup> CFU/g	1.0x10 <sup>2</sup> - 1.5x10 <sup>4</sup>	None Detected	
TM26: Culture Plating	10 <sup>2</sup> CFU/g	1.0x10 <sup>3</sup> - 1.5x10 <sup>5</sup>	None Detected	
TM27: Culture Plating	10 <sup>1</sup> CFU/g	1.0x10 <sup>2</sup> - 1.5x10 <sup>4</sup>	None Detected	
	TM25: PCR TM25: PCR TM24: Culture Plating TM26: Culture Plating TM27: Culture	TM25: PCR100° CFU/25gTM25: PCR10° CFU/25gTM24: Culture Plating10° CFU/gTM26: Culture Plating10° CFU/gTM27: Culture 10° CFU/g10° CFU/g	TM25: PCR 10 <sup>0</sup> CFU/25g NA   TM25: PCR 10 <sup>0</sup> CFU/25g NA   TM24: Culture Plating 10 <sup>1</sup> CFU/g 1.0x10 <sup>2</sup> - 1.5x10 <sup>4</sup> TM26: Culture Plating 10 <sup>2</sup> CFU/g 1.0x10 <sup>3</sup> - 1.5x10 <sup>5</sup> TM27: Culture 10 <sup>1</sup> CFU/g 1.0x10 <sup>2</sup> - 1.5x10 <sup>4</sup>	MethodLODRangeResultTM25: PCR10° CFU/25gNAAbsentTM25: PCR10° CFU/25gNAAbsentTM24: Culture Plating10° CFU/g1.0x10² - 1.5x10⁴None DetectedTM26: Culture Plating10² CFU/g1.0x10³ - 1.5x10⁵None DetectedTM27: Culture Hating10° CFU/g1.0x10² - 1.5x10⁴None Detected

### **Final Approval**

07Apr2023 Eden Thompson

Eden Thompson-Wright 03:00:00 PM MDT

best lehen APPROVED BY / DATE

Brett Hudson 07Apr2023 03:26:00 PM MDT

PREPARED BY / DATE

### **Heavy Metals**

Test ID: T000240453 Methods: TM19 (ICP-MS): Heavy

Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.04 - 4.11	ND	
Cadmium	0.04 - 4.27	ND	-
Mercury	0.04 - 4.16	ND	
Lead	0.04 - 4.17	ND	

### **Final Approval**

Sam Smith Samanthe Small PREPARED BY / DATE

07Apr2023 03:09:00 PM MDT

Karen Winternheimer 07Apr2023

APPROVED BY / DATE

MATEMALEMEN 03:11:00 PM MDT



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Definitions

https://results.botanacor.com/api/v1/coas/uuid/29144fba-464c-474a-a2c2-a37b44110c4e

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-THC a\*(0.877)) and Total CBD = CBD + (CBD a\*(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 by dynamic range of the method), during decarboxylation step. Total Potential THC is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step. Total Potential THC is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step. Total POTEC = 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.

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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