

Puff - Dragonfruit Cloudberry

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	
011724-PCB	Various	Unit	-	
Reported:	Started:	Received:		
12Jan2024	12Jan2024	12Jan2024		

Cannabinoids

Methods: TM14 (HPLC-DAD)	LOD (mg)	LOQ (mg)	Result (mg)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.184	0.513	ND	ND	# of Servings = 1
Cannabichromenic Acid (CBCA)	0.168	0.470	ND	ND	Sample
Cannabidiol (CBD)	0.498	1.332	ND	ND	Weight=355g
Cannabidiolic Acid (CBDA)	0.510	1.366	ND	ND	
Cannabidivarin (CBDV)	0.118	0.315	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.213	0.570	ND	ND	
Cannabigerol (CBG)	0.104	0.292	0.330	0.00	
Cannabigerolic Acid (CBGA)	0.436	1.219	ND	ND	
Cannabinol (CBN)	0.136	0.380	<loq< td=""><td><loq< td=""><td></td></loq<></td></loq<>	<loq< td=""><td></td></loq<>	
Cannabinolic Acid (CBNA)	0.298	0.831	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.520	1.452	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.472	1.319	9.710	0.00	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.418	1.168	ND	ND	
Tetrahydrocannabivarin (THCV)	0.095	0.265	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.369	1.030	ND	ND	
Total Cannabinoids			10.040	0.00	
Total Potential THC			9.710	0.00	
Total Potential CBD			ND	ND	

Sam Smith

Final Approval

Winternheimen 12Jan2024 04:24:00 PM MST

Karen Winternheimer

PREPARED BY / DATE

Samantha Smith 12Jan2024 04:25:00 PM MST

APPROVED BY / DATE



CERTIFICATE OF ANALYSIS

Prepared for:

Bent Paddle Brewing Co

1912 W Michigan St. Duluth, MN USA 55806

Puff - Dragonfruit Cloudberry		Duluth,	MN UŠA 55806	
Batch ID or Lot Number: 011724-PCB	Test, Test ID and Methods: Various	Matrix: Unit	Page 2 of 4	
Reported: 12Jan2024	Started: 12Jan2024	Received: 12Jan2024		

Microbial **Contaminants**

Test ID: T000267622			Quantitation		
Methods: TM25 (PCR) TM24, TM26, TM27 (Culture Plating)	Method	LOD	Quantitation	Result	Notes
	Methou	LOD	Range	Result	Notes
STEC	TM25: PCR	10 ⁰ CFU/25g	NA	Absent	Free from visual mold, mildew, and - foreign matter
Salmonella	TM25: PCR	10 ⁰ CFU/25g	NA	Absent	loreign matter
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



Brett Hudson 16Jan2024 04:22:00 PM MST

Brianne Maillot

Brianne Maillot 16Jan2024 04:33:00 PM MST

PREPARED BY / DATE

APPROVED BY / DATE



CERTIFICATE OF ANALYSIS

Prepared for:

Bent Paddle Brewing Co

1912 W Michigan St. Duluth, MN USA 55806

Puff - Dragonfruit Cloudberry		Duluth, MN USA 55806		
Batch ID or Lot Number: 011724-PCB	Test, Test ID and Methods: Various	Matrix: Unit	Page 3 of 4	
Reported: 12Jan2024	Started: 12Jan2024	Received: 12Jan2024		

Pesticides

Test ID: T000267621

Methods: TM17			
(LC-QQ LC MS/MS)	Dynamic Range (ppb)	Result (ppb)	
Abamectin	311 - 2831	ND	Mala
Acephate	40 - 2758	ND	Meta
Acetamiprid	43 - 2718	ND	Met
Azoxystrobin	43 - 2716	ND	Met
Bifenazate	44 - 2695	ND	MGł
Boscalid	42 - 2734	ND	MGł
Carbaryl	41 - 2697	ND	Мус
Carbofuran	44 - 2706	ND	Nale
Chlorantraniliprole	42 - 2772	ND	Oxa
Chlorpyrifos	42 - 2771	ND	Pacl
Clofentezine	282 - 2719	ND	Perr
Diazinon	271 - 2723	ND	Pho
Dichlorvos	271 - 2767	ND	Prop
Dimethoate	43 - 2709	ND	Prop
E-Fenpyroximate	264 - 2851	ND	Pyrio
Etofenprox	42 - 2778	ND	Spin
Etoxazole	281 - 2696	ND	Spin
Fenoxycarb	43 - 2739	ND	Spire
Fipronil	54 - 2790	ND	Spire
Flonicamid	50 - 2792	ND	Spir
Fludioxonil	283 - 2738	ND	Spir
Hexythiazox	40 - 2806	ND	Teb
Imazalil	264 - 2746	ND	Thia
Imidacloprid	38 - 2799	ND	Thia
Kresoxim-methyl	43 - 2739	ND	Trifle

	Dynamic Range (ppb)	Result (ppb)
Malathion	276 - 2695	ND
Metalaxyl	44 - 2712	ND
Methiocarb	38 - 2787	ND
Methomyl	43 - 2772	ND
MGK 264 1	158 - 1629	ND
MGK 264 2	113 - 1090	ND
Myclobutanil	70 - 2723	ND
Naled	46 - 2668	ND
Oxamyl	42 - 2768	ND
Paclobutrazol	46 - 2692	ND
Permethrin	289 - 2802	ND
Phosmet	40 - 2590	ND
Prophos	275 - 2751	ND
Propoxur	43 - 2702	ND
Pyridaben	290 - 2755	ND
Spinosad A	34 - 2084	ND
Spinosad D	66 - 682	ND
Spiromesifen	263 - 2781	ND
Spirotetramat	282 - 2798	ND
Spiroxamine 1	15 - 1055	ND
Spiroxamine 2	23 - 1629	ND
Tebuconazole	274 - 2726	ND
Thiacloprid	45 - 2728	ND
Thiamethoxam	42 - 2767	ND
Trifloxystrobin	44 - 2718	ND

Final Approval



Karen Winternheimer 17Jan2024 Munhumen 08:38:00 AM MST

Sam Smith

Samantha Smoll 17Jan2024 08:39:00 AM MST

PREPARED BY / DATE

APPROVED BY / DATE



CERTIFICATE OF ANALYSIS

Prepared for:

Bent Paddle Brewing Co

1912 W Michigan St. Duluth, MN USA 55806

Puff - Drago	nfruit C	loudberry
--------------	----------	-----------

	-			
Batch ID or Lot Number: 011724-PCB	Test, Test ID and Methods: Various	Matrix: Unit	Page 4 of 4	
Reported: 12Jan2024	Started: 12Jan2024	Received: 12Jan2024		

Heavy Metals

Test ID: T000267623			
Methods: TM19 (ICP-MS): Heavy			
Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.05 - 4.51	ND	
Cadmium	0.05 - 4.59	ND	-
Mercury	0.05 - 4.59	ND	-
Lead	0.05 - 4.65	ND	_

Final Approval

Sam Smith Samantha Smoth 18Jan2024 02:49:00 PM MST PREPARED BY / DATE

Karen Winternheimer 18Jan2024 Withmheimen 03:01:00 PM MST

APPROVED BY / DATE



Definitions

https://results.botanacor.com/api/v1/coas/uuid/812bab87-b85c-432b-ab14-8536150cd105

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.



812bab87b85c432bab148536150cd105.1