

CERTIFICATE OF ANALYSIS

Prepared for:

Bent Paddle Brewing Co

1912 W Michigan St. Duluth, MN USA 55806

Superior Seltzer - Black Cherry Lemonade

Batch ID or Lot Number:	Test, Test ID and Methods:	Matrix:	Page 2 of 4
122823-BCL	Various	Unit	
Reported:	Started:	Received:	
27Dec2023	27Dec2023	27Dec2023	

Microbial **Contaminants**

Methods: TM25 (PCR) TM24, TM26,			Quantitation	
Method	LOD	Range	Result	Notes
TM25: PCR	10 ⁰ CFU/25g	NA	Absent	Free from visual mold, mildew, and - foreign matter
TM25: PCR	10 ⁰ CFU/25g	NA	Absent	
TM24: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	
TM26: Culture Plating	10 ² CFU/g	1.0x10 ³ - 1.5x10 ⁵	<lloq< td=""><td></td></lloq<>	
TM27: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	m
	Method TM25: PCR TM25: PCR TM24: Culture Plating TM26: Culture Plating TM27: Culture Plating	MethodLODTM25: PCR10° CFU/25gTM25: PCR10° CFU/25gTM24: Culture Plating10° CFU/gTM26: Culture Plating10° CFU/gTM27: Culture Plating10° CFU/g	Method LOD Quantitation Range TM25: PCR 10 ⁰ CFU/25g NA TM25: PCR 10 ⁰ CFU/25g NA TM24: Culture Plating 10 ¹ CFU/g 1.0x10 ² - 1.5x10 ⁴ TM26: Culture Plating 10 ² CFU/g 1.0x10 ³ - 1.5x10 ⁴ TM27: Culture Plating 10 ¹ CFU/g 1.0x10 ² - 1.5x10 ⁴	MethodLODQuantitation RangeResultTM25: PCR10° CFU/25gNAAbsentTM25: PCR10° CFU/25gNAAbsentTM24: Culture Plating10° CFU/g1.0x10² - 1.5x10⁴None DetectedTM26: Culture Plating10° CFU/g1.0x10° - 1.5x10⁵ <lloq< td="">TM27: Culture Plating10° CFU/g1.0x10° - 1.5x10⁴None Detected</lloq<>

Final Approval



best lehen APPROVED BY / DATE

Brett Hudson 02Jan2024 01:04:00 PM MST

PREPARED BY / DATE

Heavy Metals

Test ID: T000266019 Methods: TM19 (ICP-MS): Heavy

Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.04 - 4.24	ND	
Cadmium	0.04 - 4.11	ND	
Mercury	0.04 - 4.27	ND	
Lead	0.04 - 4.08	ND	

Final Approval

Samanthe mode

Sam Smith 03Jan2024 10:38:00 AM MST

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Karen Winternheimer 03Jan2024 10:41:00 AM MST

PREPARED BY / DATE

APPROVED BY / DATE



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Pesticides

Test ID: T000266017

Methods: TM17		
(LC-QQ LC MS/MS)	Dynamic Range (ppb)	Result (ppb)
Abamectin	313 - 2683	ND
Acephate	42 - 2718	ND
Acetamiprid	44 - 2701	ND
Azoxystrobin	46 - 2713	ND
Bifenazate	46 - 2730	ND
Boscalid	47 - 2764	ND
Carbaryl	44 - 2699	ND
Carbofuran	43 - 2699	ND
Chlorantraniliprole	44 - 2788	ND
Chlorpyrifos	53 - 2703	ND
Clofentezine	288 - 2742	ND
Diazinon	278 - 2719	ND
Dichlorvos	288 - 2694	ND
Dimethoate	43 - 2704	ND
E-Fenpyroximate	276 - 2764	ND
Etofenprox	47 - 2700	ND
Etoxazole	290 - 2635	ND
Fenoxycarb	49 - 2754	ND
Fipronil	56 - 2686	ND
Flonicamid	46 - 2747	ND
Fludioxonil	303 - 2742	ND
Hexythiazox	49 - 2725	ND
Imazalil	274 - 2745	ND
Imidacloprid	40 - 2749	ND
Kresoxim-methyl	46 - 2760	ND

	Dynamic Range (ppb)	Result (ppb)
Malathion	290 - 2696	ND
Metalaxyl	44 - 2712	ND
Methiocarb	43 - 2781	ND
Methomyl	42 - 2742	ND
MGK 264 1	170 - 1624	ND
MGK 264 2	117 - 1075	ND
Myclobutanil	13 - 2763	ND
Naled	45 - 2672	ND
Oxamyl	42 - 2752	ND
Paclobutrazol	42 - 2697	ND
Permethrin	286 - 2754	ND
Phosmet	45 - 2614	ND
Prophos	298 - 2772	ND
Propoxur	44 - 2715	ND
Pyridaben	301 - 2685	ND
Spinosad A	33 - 2090	ND
Spinosad D	63 - 664	ND
Spiromesifen	269 - 2716	ND
Spirotetramat	272 - 2795	ND
Spiroxamine 1	17 - 1053	ND
Spiroxamine 2	27 - 1616	ND
Tebuconazole	281 - 2738	ND
Thiacloprid	45 - 2702	ND
Thiamethoxam	43 - 2744	ND
Trifloxystrohin	48 - 2729	ND

Final Approval

Samanthe Small

Sam Smith 04Jan2024 09:17:00 AM MST

APPROVED BY / DATE

Karen Winternheimer 04Jan2024 Mtenheimer 09:21:00 AM MST

PREPARED BY / DATE



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Definitions

https://results.botanacor.com/api/v1/coas/uuid/07d6d90b-6a27-4614-8534-0d0e27a27c21

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 *****(0.877)) and Total CBD = (CBD *****(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 PC = 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 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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