SC Labs®
Formerly Botanacor Labs

CERTIFICATE OF ANALYSIS

Prepared for:
Lupulin Brewing Company
570 Humboldt Drive, Ste. 107
Big Lake, MN USA 55309

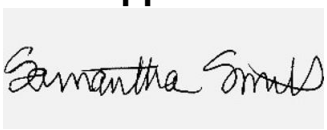
Smaze Bomb Strawberry Lemonade

Batch ID or Lot Number: **SZB1**	Test: **Potency**	Reported: **12Jan2023**	USDA License: N/A
Matrix: Unit	Test ID: T000232666	Started: 12Jan2023	Sampler ID: N/A
	Method(s): TM14 (HPLC-DAD)	Received: 12Jan2023	Status: N/A

Cannabinoids

	LOD (mg)	**LOQ** (mg)	**Result** (mg)	**Result** (mg/g)	**Notes**
Cannabichromene (CBC)	0.298	1.026	<LOQ	<LOQ	# of Servings = 1, Sample Weight=750g
Cannabichromenic Acid (CBCA)	0.273	0.938	ND	ND	
Cannabidiol (CBD)	1.098	2.739	ND	ND	
Cannabidiolic Acid (CBDA)	1.126	2.809	ND	ND	
Cannabidivarin (CBDV)	0.260	0.648	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.470	1.172	ND	ND	
Cannabigerol (CBG)	0.169	0.582	1.310	0.00	
Cannabigerolic Acid (CBGA)	0.707	2.435	ND	ND	
Cannabinol (CBN)	0.221	0.760	4.980	0.00	
Cannabinolic Acid (CBNA)	0.483	1.661	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.843	2.901	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.765	2.634	46.880	0.10	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.678	2.334	ND	ND	
Tetrahydrocannabivarin (THCV)	0.154	0.530	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.598	2.059	ND	ND	
Total Cannabinoids			**53.170**	**0.10**	
Total Potential THC			46.880	0.10	
Total Potential CBD			ND	ND	

Final Approval



Sam Smith
12Jan2023
01:07:00 PM MST
PREPARED BY / DATE

Karen Winternheimer
12Jan2023
01:17:00 PM MST
APPROVED BY / DATE

https://results.botanacor.com/api/v1/coas/uuid/1dafb7d8-df0d-455e-839b-a203e43f4e5d

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)).

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	Various	Unit	
Reported:	Started:	Received:	
19Jan2023	18Jan2023	16Jan2023	

Heavy Metals

Test ID: T000233064
Methods: TM19 (ICP-MS): Heavy Metals

	Dynamic Range (ppm)	**Result** (ppm)	**Notes**
Arsenic	0.05 - 4.54	ND	
Cadmium	0.04 - 4.38	ND	
Mercury	0.04 - 4.37	ND	
Lead	0.05 - 5.26	ND	

Final Approval

Sam Smith
19Jan2023
10:52:00 AM MST
PREPARED BY / DATE

Karen Winternheimer
19Jan2023
10:56:00 AM MST
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Big Lake, MN USA 55309

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19Jan2023	18Jan2023	16Jan2023	

Pesticides

Test ID: T000233062
Methods: TM17

(LC-QQ LC MS/MS)	**Dynamic Range** (ppb)	**Result** (ppb)		**Dynamic Range** (ppb)	**Result** (ppb)
Abamectin	320 - 2724	ND	Malathion	293 - 2732	ND
Acephate	43 - 2822	ND	Metalaxyl	41 - 2751	ND
Acetamiprid	41 - 2774	ND	Methiocarb	45 - 2813	ND
Azoxystrobin	44 - 2723	ND	Methomyl	39 - 2813	ND
Bifenazate	46 - 2720	ND	MGK 264 1	174 - 1627	ND
Boscalid	38 - 2883	ND	MGK 264 2	116 - 1134	ND
Carbaryl	43 - 2739	ND	Myclobutanil	55 - 2829	ND
Carbofuran	42 - 2712	ND	Naled	48 - 2745	ND
Chlorantraniliprole	49 - 2785	ND	Oxamyl	39 - 2802	ND
Chlorpyrifos	50 - 2727	ND	Paclobutrazol	50 - 2693	ND
Clofentezine	286 - 2736	ND	Permethrin	166 - 2792	ND
Diazinon	270 - 2724	ND	Phosmet	39 - 2724	ND
Dichlorvos	280 - 2782	ND	Prophos	291 - 2829	ND
Dimethoate	40 - 2774	ND	Propoxur	43 - 2732	ND
E-Fenpyroximate	284 - 2729	ND	Pyridaben	295 - 2726	ND
Etofenprox	43 - 2709	ND	Spinosad A	35 - 2252	ND
Etoxazole	295 - 2729	ND	Spinosad D	48 - 494	ND
Fenoxycarb	40 - 2754	ND	Spiromesifen	284 - 2752	ND
Fipronil	68 - 2730	ND	Spirotetramat	283 - 2758	ND
Flonicamid	55 - 2849	ND	Spiroxamine 1	18 - 1193	ND
Fludioxonil	288 - 2866	ND	Spiroxamine 2	19 - 1620	ND
Hexythiazox	45 - 2748	ND	Tebuconazole	270 - 2766	ND
Imazalil	251 - 2736	ND	Thiacloprid	43 - 2779	ND
Imidacloprid	48 - 2784	ND	Thiamethoxam	34 - 2824	ND
Kresoxim-methyl	43 - 2766	ND	Trifloxystrobin	42 - 2745	ND

Final Approval

Karen Winternheimer
20Jan2023
09:04:00 AM MST
PREPARED BY / DATE

Sam Smith
20Jan2023
09:08:00 AM MST
APPROVED BY / DATE

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Microbial Contaminants

Test ID: T000233063
Methods: TM25 (PCR) TM24, TM26, TM27 (Culture Plating)

	Method	LOD	Quantitation 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	
Total Yeast and Mold*	TM24: Culture Plating	10^1 CFU/g	$1.0x10^2$ - $1.5x10^4$	4.2x10^2 CFU/g	
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

Brianne Maillot
20Jan2023
10:44:00 AM MST
PREPARED BY / DATE

Brett Hudson
20Jan2023
04:37:00 PM MST
APPROVED BY / DATE

https://results.botanacor.com/api/v1/coas/uuid/0e24f8f5-1b9f-4caa-99b2-bb4905603e05

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.

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