

Prepared for:

Lupulin Brewing Company

570 Humboldt Drive, Ste. 107
Big Lake, MN USA 55309

Smazey Strawberry Lemonade

Batch ID or Lot Number: SMZ2	Test: Potency	Reported: 01Nov2022	USDA License: N/A
Matrix: Unit	Test ID: T000226235	Started: 31Oct2022	Sampler ID: N/A
	Method(s): TM14 (HPLC-DAD)	Received: 31Oct2022	Status: N/A

Cannabinoids

	LOD (mg)	LOQ (mg)	Result (mg)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.256	0.694	ND	ND	# of Servings = 1, Sample Weight=474.12g
Cannabichromenic Acid (CBCA)	0.234	0.635	ND	ND	
Cannabidiol (CBD)	0.574	1.960	ND	ND	
Cannabidiolic Acid (CBDA)	0.588	2.011	ND	ND	
Cannabidivarin (CBDV)	0.136	0.464	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.245	0.839	ND	ND	
Cannabigerol (CBG)	0.146	0.394	ND	ND	
Cannabigerolic Acid (CBGA)	0.608	1.648	ND	ND	
Cannabinol (CBN)	0.190	0.514	ND	ND	
Cannabinolic Acid (CBNA)	0.415	1.124	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.725	1.963	<LOQ	<LOQ	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.658	1.783	11.200	0.00	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.583	1.580	ND	ND	
Tetrahydrocannabivarin (THCV)	0.132	0.359	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.514	1.393	ND	ND	
Total Cannabinoids			11.200	0.00	
Total Potential THC			11.200	0.00	
Total Potential CBD			ND	ND	

Final Approval



Karen Winternheimer
01Nov2022
08:53:00 AM MDT

PREPARED BY / DATE



Sam Smith
01Nov2022
08:54:00 AM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/26b3ce1c-74bf-465a-87dc-93fc1811a6b3>

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 Accredited by A2LA.



Cert #4329.02
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Prepared for:

Lupulin Brewing Company

570 Humboldt Drive, Ste. 107
Big Lake, MN USA 55309

Smazey Strawberry Lemonade

Batch ID or Lot Number:	Test, Test ID and Methods: Various	Matrix: Unit	Page 1 of 3
Reported: 19Jan2023	Started: 18Jan2023	Received: 16Jan2023	

Heavy Metals

Test ID: T000233067


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

APPROVED BY / DATE

Prepared for:

Lupulin Brewing Company

570 Humboldt Drive, Ste. 107
Big Lake, MN USA 55309

Smazey Strawberry Lemonade

Batch ID or Lot Number:	Test, Test ID and Methods: Various	Matrix: Unit	Page 2 of 3
Reported: 19Jan2023	Started: 18Jan2023	Received: 16Jan2023	

Pesticides


Test ID: T000233065


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	Paclbutrazol	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
Etoazole	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

Prepared for:

Lupulin Brewing Company

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Big Lake, MN USA 55309

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Batch ID or Lot Number:	Test, Test ID and Methods: Various	Matrix: Unit	Page 3 of 3
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Microbial Contaminants

Test ID: T000233066

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
<i>Salmonella</i>	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	None Detected	
Total Aerobic Count*	TM26: Culture Plating	10 ² CFU/g	1.0x10 ³ - 1.5x10 ⁵	<LLOQ	
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


Brett Hudson
20Jan2023
04:37:00 PM MST

PREPARED BY / DATE

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/e7bdb045-1eee-4434-a4a2-c6d78bc3a36a>

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: 10² = 100 CFU, 10³ = 1,000 CFU, 10⁴ = 10,000 CFU, 10⁵ = 100,000 CFU.

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