SC Labs®
Formerly Botanacor Labs

CERTIFICATE OF ANALYSIS

Prepared for:
Bent Paddle Brewing Co
1912 W Michigan St.
Duluth, MN USA 55806

THC+ Mango Tangerine

Batch ID or Lot Number:	Test, Test ID and Methods:	Matrix:	Page 1 of 4
011724-PCB	Various	Unit	
Reported:	**Started:**	**Received:**	
31Jan2024	31Jan2024	31Jan2024	

Cannabinoids

Test ID: T000269274
Methods: TM14 (HPLC-DAD)

	LOD (mg)	**LOQ** (mg)	**Result** (mg)	**Result** (mg/g)	**Notes**
Cannabichromene (CBC)	0.143	0.496	ND	ND	# of Servings = 1, Sample Weight=355g
Cannabichromenic Acid (CBCA)	0.131	0.454	ND	ND	
Cannabidiol (CBD)	0.452	1.457	4.830	0.00	
Cannabidiolic Acid (CBDA)	0.463	1.495	ND	ND	
Cannabidivarin (CBDV)	0.107	0.345	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.193	0.624	ND	ND	
Cannabigerol (CBG)	0.081	0.282	<LOQ	<LOQ	
Cannabigerolic Acid (CBGA)	0.340	1.178	ND	ND	
Cannabinol (CBN)	0.106	0.367	ND	ND	
Cannabinolic Acid (CBNA)	0.232	0.803	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.405	1.403	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.368	1.274	4.900	0.00	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.326	1.129	ND	ND	
Tetrahydrocannabivarin (THCV)	0.074	0.256	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.288	0.996	ND	ND	
Total Cannabinoids			**9.730**	**0.00**	
Total Potential THC			4.900	0.00	
Total Potential CBD			4.830	0.00	

Final Approval

Sam Smith
31Jan2024
02:58:00 PM MST
PREPARED BY / DATE

Karen Winternheimer
31Jan2024
03:06:00 PM MST
APPROVED BY / DATE

Heavy Metals

Test ID: T000269277
Methods: TM19 (ICP-MS): Heavy Metals

	Dynamic Range (ppm)	**Result** (ppm)	**Notes**
Arsenic	0.04 - 4.45	ND	
Cadmium	0.05 - 4.62	ND	
Mercury	0.05 - 4.75	ND	
Lead	0.05 - 4.70	ND	

Final Approval

Sam Smith
02Feb2024
01:35:00 PM MST
PREPARED BY / DATE

Karen Winternheimer
02Feb2024
01:37:00 PM MST
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Microbial Contaminants

Test ID: T000269276
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	$1.0x10^2$ - $1.5x10^4$	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

Brianne Maillot
05Feb2024
11:29:00 AM MST
PREPARED BY / DATE

Eden Thompson-Wright
05Feb2024
12:41:00 PM MST
APPROVED BY / DATE

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Pesticides

Test ID: T000269275
Methods: TM17

(LC-QQ LC MS/MS)	**Dynamic Range** (ppb)	**Result** (ppb)		**Dynamic Range** (ppb)	**Result** (ppb)
Abamectin	322 - 2692	ND	Malathion	300 - 2685	ND
Acephate	40 - 2713	ND	Metalaxyl	43 - 2693	ND
Acetamiprid	42 - 2711	ND	Methiocarb	42 - 2675	ND
Azoxystrobin	46 - 2680	ND	Methomyl	41 - 2765	ND
Bifenazate	43 - 2700	ND	MGK 264 1	145 - 1627	ND
Boscalid	47 - 2707	ND	MGK 264 2	110 - 1097	ND
Carbaryl	42 - 2691	ND	Myclobutanil	50 - 2631	ND
Carbofuran	42 - 2677	ND	Naled	44 - 2668	ND
Chlorantraniliprole	48 - 2651	ND	Oxamyl	41 - 2770	ND
Chlorpyrifos	48 - 2744	ND	Paclobutrazol	45 - 2671	ND
Clofentezine	282 - 2731	ND	Permethrin	300 - 2757	ND
Diazinon	293 - 2717	ND	Phosmet	42 - 2585	ND
Dichlorvos	286 - 2745	ND	Prophos	289 - 2668	ND
Dimethoate	41 - 2702	ND	Propoxur	41 - 2692	ND
E-Fenpyroximate	222 - 2857	ND	Pyridaben	286 - 2731	ND
Etofenprox	44 - 2759	ND	Spinosad A	34 - 2091	ND
Etoxazole	292 - 2664	ND	Spinosad D	67 - 674	ND
Fenoxycarb	41 - 2669	ND	Spiromesifen	273 - 2744	ND
Fipronil	50 - 2773	ND	Spirotetramat	300 - 2772	ND
Flonicamid	41 - 2768	ND	Spiroxamine 1	16 - 1015	ND
Fludioxonil	278 - 2672	ND	Spiroxamine 2	22 - 1572	ND
Hexythiazox	42 - 2774	ND	Tebuconazole	290 - 2684	ND
Imazalil	278 - 2725	ND	Thiacloprid	42 - 2720	ND
Imidacloprid	40 - 2726	ND	Thiamethoxam	42 - 2744	ND
Kresoxim-methyl	43 - 2742	ND	Trifloxystrobin	44 - 2700	ND

Final Approval

Karen Winternheimer
07Feb2024
08:52:00 AM MST
PREPARED BY / DATE

Sam Smith
07Feb2024
08:55:00 AM MST
APPROVED BY / DATE

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https://results.botanacor.com/api/v1/coas/uuid/fd492524-aad2-4ef5-b188-13710d117e18

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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