

# CERTIFICATE OF ANALYSIS

**PRODUCT NAME:** Joy Organics CBD Dog Chews  
**PRODUCT STRENGTH:** 2 mg / chew  
**BATCH:** 21333C  
**BEST BY DATE:** 12/2023  
**Bulk LOT:** 3004363

*\*Click on the links to view third-party reports\**

### Physical Attributes

Test	Method	Specification	Results
Color	Joy Internal	Brown	PASS
Odor	Joy Internal	Beef and grains, with some yeast	PASS
Appearance	Joy Internal	Squat cylindrical dog treats a plastic amber container	PASS
Primary Package Eval.	Joy Internal	Container clean and free of filth. Container caps tight and pressure seal is intact.	PASS
Secondary Package Eval.	Joy Internal	Labeling Compliance Checked, Cartons sturdy and clean. Sufficient cushion material exists. Box taped and secure.	PASS

### Review of Third-Party Analysis

Panel	Method	Specification	Results*	Pass/Fail
<b>Potency - Total CBD</b>	HPLC-UV DAD	LOQ*: ≥ 2 mg / chew	<b>2.6 mg</b>	PASS
<b>Potency - D9-THC</b>	HPLC-UV DAD	LOQ: <0.01% (broad spectrum)	<b>&lt;0.01%</b>	PASS
<b>Pesticide Panel</b>	LCMS-MS	Not Tested	<b>N/A</b>	N/A
<b>Microbial</b> Escherichia coli (STEC)	qPCR	Complies with USP 61/62	<b>Absent</b>	PASS
<b>Microbial</b> Salmonella	qPCR	Complies with USP 61/62	<b>Absent</b>	PASS
<b>Microbial</b> Yeast and Mold	Culture Plating	Complies with USP 61/62	<b>Below LOQ</b>	PASS
<b>Microbial</b> Total Coliforms	Culture Plating	Complies with USP 61/62	<b>Below LOQ</b>	PASS
<b>Microbial</b> Total Aerobic Count	Culture Plating	Complies with USP 61/62	<b>4.2 x 10<sup>3</sup></b>	PASS
<b>Heavy Metals</b>	ICP-MS	Arsenic (As): ≤1.5 ppm† Cadmium (Cd): ≤0.5 ppm Lead (Pb): ≤0.5 ppm Mercury (Hg): ≤1.5 ppm	<b>Below LOQ</b>	PASS
<b>Mycotoxins</b>	LCMS-MS	Total Aflatoxins <20 ppb†† Aflatoxin B1 < 20 ppb Ochratoxin < 20 ppb	<b>Below LOQ</b>	PASS
<b>Residual Solvents</b>	GC-MS	Not Tested	<b>N/A</b>	N/A

\*Level of Quantification  
† Parts Per Million †† Part Per Billion

Quality Certified Keegan Schlittler 12/13/2021  
 Keegan Schlittler  
 Quality Assurance Manager Date



# Certificate of Analysis

Sample: DE11119027-003

Harvest/Lot ID: N/A

Batch#: N/A

Seed to Sale# 1A4000B00010D25000000881

Batch Date: N/A

Sample Size Received: 48 gram

Total Weight/Volume: N/A

Retail Product Size: N/A gram

Ordered : 11/18/21

sampled : 11/18/21

Completed: 11/27/21

Sampling Method: SOP-024

**PASSED**

Page 1 of 2

Nov 27, 2021

License # 405R-00011

615 Wooten Rd Suite 110

Colorado Springs CO, 80915, US

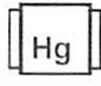
PRODUCT IMAGE



SAFETY RESULTS



Pesticides



Heavy Metals  
**PASSED**



Microbials  
**PASSED**



Mycotoxins  
**PASSED**



Residuals Solvents



Filtration



Water Activity



Moisture



Homogeneity



Terpenes  
NOT TESTED

CANNABINOID RESULTS



Total THC  
**0.005%**



Total CBD  
**0.063%**



Total Cannabinoids  
**0.069%**



Cannabinoid Profile Test

Analyzed by  
1259

Weight  
4.1619g

Extraction date :  
11/22/21 15:11:41

Extracted By :  
[64]

Analysis Method -SOP-020 (R15)

Reviewed On - 11/23/21 15:07:29

Batch Date : 11/22/21 10:45:53

Analytical Batch -DE002697POT

Instrument Used : Agilent 1100 "Falcor" Running On : 11/22/21 19:00:41

Reagent	Dilution	Consums. ID	Consums. ID
101221-001	40	07051275	92106-92348
111221-001		1119999	5079-52506-5258
121221-001		8G045	
131221-001		81KB34782	
141221-001		258076054	
151221-002		12211-108CC 100	

Our High-Resolution Cannabis Analysis utilizes High Performance Liquid Chromatography with a QTOF detector with 20K resolution. Method SOP-022 (R1) is for accuracy, lower limit of linearity for all cannabinoids is 1 ppm.



# Certificate of Analysis

**PASSED**

Sample ID: DE1119027-003

815 Wooten Rd Suite 110  
Colorado Springs, CO, 80915, US  
Telephone: 719-574-7199  
Email: info@kaychalabs.com  
License #: 1058700033

Sample #: DE1119027-003

Harvest/LOT ID: N/A

Batch#: N/A

Sampled: 11/18/21

Ordered: 11/18/21

Sample Size Received: 48 gram

Total Weight/Volume: N/A

Completed: 11/27/21 Expires: 11/27/22

Sample Method: SOP-024

Page 2 of 2



## Microbials

**PASSED**



## Mycotoxins

**PASSED**

**Analyte**  
TOTAL YEAST AND MOLD  
SHIGA TOXIN PRODUCING ESCHERICHIA COLI STEC  
SALMONELLA SPECIES  
TOTAL AEROBIC  
TOTAL COLIFORM

LOD

**Result**

not present in 2 gram  
not present in 1 gram  
not present in 1 gram  
1500  
0

**Analyte**

AFLATOXIN G2  
AFLATOXIN G1  
AFLATOXIN B2  
AFLATOXIN B1  
OCHRATOXIN A+  
AFLATOXINS

LOD

Units

Result

Action Level

0.200 ppb ND 20  
0.100 ppb ND 20  
0.0500 ppb ND 20  
0.100 ppb ND 20  
0.0400 ppb ND 25  
0 ppb 20

Analysis Method: SOP-021 (R2) | SOP-022 (R2) | SOP-023 (R1)  
Analytical Batch: HFD02658MC | Batch Date: 11/22/21 11:06:30  
Instrument Used: HPLC/MS - Full Panel  
Running On: 11/22/21 16:31:25

Analysis Method: SOP-024 (R5)  
Analytical Batch: DE002191HEC | Reviewed On: 11/23/21 14:26:45  
Instrument Used: Seis 5500 Otop - Mycotoxins  
Running On: 11/23/21 08:02:34

Analyzed by	Weight	Extraction date	Extracted By		
5	22.67g	11/22/21 04:11:18	K		
Reagent	Reagent	Reagent	Dilution	Consums. ID	Consums. ID
110271-001	110271-002	111121-001	1	16564-105C6-106H	0
110271-001	081811-001	112211-002		10898-021C4-021A0	9730-0220
110271-001	055521-002	110821-006		210116-361-B	7206720
110271-001	100418-001	110721-006		210627-687	70158
110271-001	101018-001	111821-005		210627-688	68103
110271-001	101018-001	082221-001		17765-115CC-115	082200033

Analyzed by	Weight	Extraction date	Extracted By
1696	0.147g	11/22/21 02:12:37	1696
1696	0.147g	11/22/21 02:12:37	1696



## Heavy Metals

**PASSED**

Reagent	Dilution	Consums. ID
082721-001	1M	04008-0401
081821-001		12911-120CC-008
081420-001		9264-9264
112221-001		

Metal	LOD	Unit	Result	Action Level
ARSENIC	0.0020	ppm	0.046	1.5
CADMIUM	0.0018	ppm	0.034	0.5
MERCURY	0.0025	ppm	ND	1
LEAD	0.0131	ppm	0.046	1

Analyzed by	Weight	Extraction date	Extracted By
7	0.409g	11/23/21 12:11:31	1696
7	0.409g	11/23/21 12:11:31	1696

Analysis Method: SOP-050 (R3)  
Analytical Batch: DE002701HEA | Reviewed On: 11/24/21 10:27:49  
Instrument Used: Shimadzu 2030 ICP-MS  
Running On: 11/23/21 17:16:56  
Batch Date: 11/23/21 09:06:17

Heavy Metals = systemically determined using ICP-MS in accordance with the following methods: EPA 8210-A, EPA 8210-B, EPA 8210-C, EPA 8210-D, EPA 8210-E, EPA 8210-F, EPA 8210-G, EPA 8210-H, EPA 8210-I, EPA 8210-J, EPA 8210-K, EPA 8210-L, EPA 8210-M, EPA 8210-N, EPA 8210-O, EPA 8210-P, EPA 8210-Q, EPA 8210-R, EPA 8210-S, EPA 8210-T, EPA 8210-U, EPA 8210-V, EPA 8210-W, EPA 8210-X, EPA 8210-Y, EPA 8210-Z, EPA 8210-AA, EPA 8210-AB, EPA 8210-AC, EPA 8210-AD, EPA 8210-AE, EPA 8210-AF, EPA 8210-AG, EPA 8210-AH, EPA 8210-AI, EPA 8210-AJ, EPA 8210-AM, EPA 8210-AN, EPA 8210-AO, EPA 8210-AP, EPA 8210-AQ, EPA 8210-AR, EPA 8210-AS, EPA 8210-AT, EPA 8210-AU, EPA 8210-AV, EPA 8210-AW, EPA 8210-AX, EPA 8210-AY, EPA 8210-AZ, EPA 8210-BA, EPA 8210-BB, EPA 8210-BC, EPA 8210-BD, EPA 8210-BE, EPA 8210-BF, EPA 8210-BG, EPA 8210-BH, EPA 8210-BI, EPA 8210-BJ, EPA 8210-BM, EPA 8210-BN, EPA 8210-BO, EPA 8210-BP, EPA 8210-BQ, EPA 8210-BR, EPA 8210-BS, EPA 8210-BT, EPA 8210-BU, EPA 8210-BV, EPA 8210-BW, EPA 8210-BX, EPA 8210-BY, EPA 8210-BZ, EPA 8210-CA, EPA 8210-CB, EPA 8210-CC, EPA 8210-CD, EPA 8210-CE, EPA 8210-CF, EPA 8210-CG, EPA 8210-CH, EPA 8210-CI, EPA 8210-CJ, EPA 8210-CM, EPA 8210-CN, EPA 8210-CO, EPA 8210-CP, EPA 8210-CQ, EPA 8210-CR, EPA 8210-CS, EPA 8210-CT, EPA 8210-CU, EPA 8210-CV, EPA 8210-CW, EPA 8210-CX, EPA 8210-CY, EPA 8210-CZ, EPA 8210-DA, EPA 8210-DB, EPA 8210-DC, EPA 8210-DD, EPA 8210-DE, EPA 8210-DF, EPA 8210-DG, EPA 8210-DH, EPA 8210-DI, EPA 8210-DJ, EPA 8210-DM, EPA 8210-DN, EPA 8210-DO, EPA 8210-DP, EPA 8210-DQ, EPA 8210-DR, EPA 8210-DS, EPA 8210-DT, EPA 8210-DU, EPA 8210-DV, EPA 8210-DW, EPA 8210-DX, EPA 8210-DY, EPA 8210-DZ, EPA 8210-EA, EPA 8210-EB, EPA 8210-EC, EPA 8210-ED, EPA 8210-EE, EPA 8210-EF, EPA 8210-EG, EPA 8210-EH, EPA 8210-EI, EPA 8210-EJ, EPA 8210-EM, EPA 8210-EN, EPA 8210-EO, EPA 8210-EP, EPA 8210-EQ, EPA 8210-ER, EPA 8210-ES, EPA 8210-ET, EPA 8210-EU, EPA 8210-EV, EPA 8210-EW, EPA 8210-EX, EPA 8210-EY, EPA 8210-EZ, EPA 8210-FA, EPA 8210-FB, EPA 8210-FC, EPA 8210-FD, EPA 8210-FE, EPA 8210-FF, EPA 8210-FG, EPA 8210-FH, EPA 8210-FI, EPA 8210-FJ, EPA 8210-FM, EPA 8210-FN, EPA 8210-FO, EPA 8210-FP, EPA 8210-FQ, EPA 8210-FR, EPA 8210-FS, EPA 8210-FT, EPA 8210-FU, EPA 8210-FV, EPA 8210-FW, EPA 8210-FX, EPA 8210-FY, EPA 8210-FZ, EPA 8210-GA, EPA 8210-GB, EPA 8210-GC, EPA 8210-GD, EPA 8210-GE, EPA 8210-GF, EPA 8210-GG, EPA 8210-GH, EPA 8210-GI, EPA 8210-GJ, EPA 8210-GM, EPA 8210-GN, EPA 8210-GO, EPA 8210-GP, EPA 8210-GQ, EPA 8210-GR, EPA 8210-GS, EPA 8210-GT, EPA 8210-GU, EPA 8210-GV, EPA 8210-GW, EPA 8210-GX, EPA 8210-GY, EPA 8210-GZ, EPA 8210-HA, EPA 8210-HB, EPA 8210-HC, EPA 8210-HD, EPA 8210-HE, EPA 8210-HF, EPA 8210-HG, EPA 8210-HI, EPA 8210-HJ, EPA 8210-HM, EPA 8210-HN, EPA 8210-HO, EPA 8210-HP, EPA 8210-HQ, EPA 8210-HR, EPA 8210-HS, EPA 8210-HT, EPA 8210-HU, EPA 8210-HV, EPA 8210-HW, EPA 8210-HX, EPA 8210-HY, EPA 8210-HZ, EPA 8210-IA, EPA 8210-IB, EPA 8210-IC, EPA 8210-ID, EPA 8210-IE, EPA 8210-IF, EPA 8210-IG, EPA 8210-IH, EPA 8210-II, EPA 8210-IJ, EPA 8210-IM, EPA 8210-IN, EPA 8210-IO, EPA 8210-IP, EPA 8210-IQ, EPA 8210-IR, EPA 8210-IS, EPA 8210-IT, EPA 8210-IU, EPA 8210-IV, EPA 8210-IW, EPA 8210-IX, EPA 8210-IY, EPA 8210-IZ, EPA 8210-JA, EPA 8210-JB, EPA 8210-JC, EPA 8210-JD, EPA 8210-JE, EPA 8210-JF, EPA 8210-JG, EPA 8210-JH, EPA 8210-JI, EPA 8210-JJ, EPA 8210-JM, EPA 8210-JN, EPA 8210-JO, EPA 8210-JP, EPA 8210-JQ, EPA 8210-JR, EPA 8210-JS, EPA 8210-JT, EPA 8210-JU, EPA 8210-JV, EPA 8210-JW, EPA 8210-JX, EPA 8210-JY, EPA 8210-JZ, EPA 8210-KA, EPA 8210-KB, EPA 8210-KC, EPA 8210-KD, EPA 8210-KE, EPA 8210-KF, EPA 8210-KG, EPA 8210-KH, EPA 8210-KI, EPA 8210-KJ, EPA 8210-KM, EPA 8210-KN, EPA 8210-KO, EPA 8210-KP, EPA 8210-KQ, EPA 8210-KR, EPA 8210-KS, EPA 8210-KT, EPA 8210-KU, EPA 8210-KV, EPA 8210-KW, EPA 8210-KX, EPA 8210-KY, EPA 8210-KZ, EPA 8210-LA, EPA 8210-LB, EPA 8210-LC, EPA 8210-LD, EPA 8210-LE, EPA 8210-LF, EPA 8210-LG, EPA 8210-LH, EPA 8210-LI, EPA 8210-LJ, EPA 8210-LM, EPA 8210-LN, EPA 8210-LO, EPA 8210-LP, EPA 8210-LQ, EPA 8210-LR, EPA 8210-LS, EPA 8210-LT, EPA 8210-LU, EPA 8210-LV, EPA 8210-LW, EPA 8210-LX, EPA 8210-LY, EPA 8210-LZ, EPA 8210-MA, EPA 8210-MB, EPA 8210-MC, EPA 8210-MD, EPA 8210-ME, EPA 8210-MF, EPA 8210-MG, EPA 8210-MH, EPA 8210-MI, EPA 8210-MJ, EPA 8210-MK, EPA 8210-ML, EPA 8210-MN, EPA 8210-MO, EPA 8210-MP, EPA 8210-MQ, EPA 8210-MR, EPA 8210-MS, EPA 8210-MT, EPA 8210-MU, EPA 8210-MV, EPA 8210-MW, EPA 8210-MX, EPA 8210-MY, EPA 8210-MZ, EPA 8210-NA, EPA 8210-NB, EPA 8210-NC, EPA 8210-ND, EPA 8210-NE, EPA 8210-NF, EPA 8210-NG, EPA 8210-NH, EPA 8210-NI, EPA 8210-NJ, EPA 8210-NK, EPA 8210-NL, EPA 8210-NO, EPA 8210-NP, EPA 8210-NQ, EPA 8210-NR, EPA 8210-NS, EPA 8210-NT, EPA 8210-NU, EPA 8210-NV, EPA 8210-NW, EPA 8210-NX, EPA 8210-NY, EPA 8210-NZ, EPA 8210-OA, EPA 8210-OB, EPA 8210-OC, EPA 8210-OD, EPA 8210-OE, EPA 8210-OF, EPA 8210-OG, EPA 8210-OH, EPA 8210-OI, EPA 8210-OJ, EPA 8210-OK, EPA 8210-OL, EPA 8210-OM, EPA 8210-ON, EPA 8210-OO, EPA 8210-OP, EPA 8210-OQ, EPA 8210-OR, EPA 8210-OS, EPA 8210-OT, EPA 8210-OU, EPA 8210-OV, EPA 8210-OW, EPA 8210-OX, EPA 8210-OY, EPA 8210-OZ, EPA 8210-PA, EPA 8210-PB, EPA 8210-PC, EPA 8210-PD, EPA 8210-PE, EPA 8210-PF, EPA 8210-PG, EPA 8210-PH, EPA 8210-PI, EPA 8210-PJ, EPA 8210-PK, EPA 8210-PL, EPA 8210-PM, EPA 8210-PN, EPA 8210-PO, EPA 8210-PP, EPA 8210-PQ, EPA 8210-PR, EPA 8210-PS, EPA 8210-PT, EPA 8210-PU, EPA 8210-PV, EPA 8210-PW, EPA 8210-PX, EPA 8210-PY, EPA 8210-PZ, EPA 8210-QA, EPA 8210-QB, EPA 8210-QC, EPA 8210-QD, EPA 8210-QE, EPA 8210-QF, EPA 8210-QG, EPA 8210-QH, EPA 8210-QI, EPA 8210-QJ, EPA 8210-QK, EPA 8210-QL, EPA 8210-QM, EPA 8210-QN, EPA 8210-QO, EPA 8210-QP, EPA 8210-QL, EPA 8210-QR, EPA 8210-QS, EPA 8210-QT, EPA 8210-QU, EPA 8210-QV, EPA 8210-QW, EPA 8210-QX, EPA 8210-QY, EPA 8210-QZ, EPA 8210-RA, EPA 8210-RB, EPA 8210-RC, EPA 8210-RD, EPA 8210-RE, EPA 8210-RF, EPA 8210-RG, EPA 8210-RH, EPA 8210-RI, EPA 8210-RJ, EPA 8210-RK, EPA 8210-RL, EPA 8210-RO, EPA 8210-RR, EPA 8210-RS, EPA 8210-RT, EPA 8210-RU, EPA 8210-RV, EPA 8210-RW, EPA 8210-RX, EPA 8210-RY, EPA 8210-RZ, EPA 8210-SA, EPA 8210-SB, EPA 8210-SC, EPA 8210-SD, EPA 8210-SE, EPA 8210-SF, EPA 8210-SG, EPA 8210-SH, EPA 8210-SI, EPA 8210-SJ, EPA 8210-SK, EPA 8210-SL, EPA 8210-SM, EPA 8210-SN, EPA 8210-SO, EPA 8210-SP, EPA 8210-SQ, EPA 8210-SR, EPA 8210-SS, EPA 8210-ST, EPA 8210-SU, EPA 8210-SV, EPA 8210-SW, EPA 8210-SX, EPA 8210-SY, EPA 8210-SZ, EPA 8210-TA, EPA 8210-TB, EPA 8210-TC, EPA 8210-TD, EPA 8210-TE, EPA 8210-TF, EPA 8210-TG, EPA 8210-TH, EPA 8210-TI, EPA 8210-TJ, EPA 8210-TK, EPA 8210-TL, EPA 8210-TM, EPA 8210-TN, EPA 8210-TO, EPA 8210-TP, EPA 8210-TQ, EPA 8210-TR, EPA 8210-TS, EPA 8210-TT, EPA 8210-TU, EPA 8210-TV, EPA 8210-TW, EPA 8210-TX, EPA 8210-TY, EPA 8210-TZ, EPA 8210-UA, EPA 8210-UB, EPA 8210-UC, EPA 8210-UD, EPA 8210-UE, EPA 8210-UF, EPA 8210-UG, EPA 8210-UH, EPA 8210-UI, EPA 8210-UJ, EPA 8210-UK, EPA 8210-UL, EPA 8210-UM, EPA 8210-UN, EPA 8210-UO, EPA 8210-UP, EPA 8210-UQ, EPA 8210-UR, EPA 8210-US, EPA 8210-UT, EPA 8210-UU, EPA 8210-UV, EPA 8210-UW, EPA 8210-UX, EPA 8210-UY, EPA 8210-UZ, EPA 8210-VA, EPA 8210-VB, EPA 8210-VC, EPA 8210-VD, EPA 8210-VE, EPA 8210-VF, EPA 8210-VG, EPA 8210-VH, EPA 8210-VI, EPA 8210-VJ, EPA 8210-VK, EPA 8210-VL, EPA 8210-VO, EPA 8210-VR, EPA 8210-VS, EPA 8210-VT, EPA 8210-VU, EPA 8210-VV, EPA 8210-VW, EPA 8210-VX, EPA 8210-VY, EPA 8210-VZ, EPA 8210-WA, EPA 8210-WB, EPA 8210-WC, EPA 8210-WD, EPA 8210-WE, EPA 8210-WF, EPA 8210-WG, EPA 8210-WH, EPA 8210-WI, EPA 8210-WJ, EPA 8210-WK, EPA 8210-WL, EPA 8210-WM, EPA 8210-WN, EPA 8210-WO, EPA 8210-WP, EPA 8210-WQ, EPA 8210-WR, EPA 8210-WS, EPA 8210-WT, EPA 8210-WU, EPA 8210-WV, EPA 8210-WW, EPA 8210-WX, EPA 8210-WY, EPA 8210-WZ, EPA 8210-XA, EPA 8210-XB, EPA 8210-XC, EPA 8210-XD, EPA 8210-XE, EPA 8210-XF, EPA 8210-XG, EPA 8210-XH, EPA 8210-XI, EPA 8210-XJ, EPA 8210-XK, EPA 8210-XL, EPA 8210-XM, EPA 8210-XN, EPA 8210-XO, EPA 8210-XP, EPA 8210-XQ, EPA 8210-XR, EPA 8210-XS, EPA 8210-XT, EPA 8210-XU, EPA 8210-XV, EPA 8210-XW, EPA 8210-XX, EPA 8210-XY, EPA 8210-XZ, EPA 8210-YA, EPA 8210-YB, EPA 8210-YC, EPA 8210-YD, EPA 8210-YE, EPA 8210-YF, EPA 8210-YG, EPA 8210-YH, EPA 8210-YI, EPA 8210-YJ, EPA 8210-YK, EPA 8210-YL, EPA 8210-YM, EPA 8210-YN, EPA 8210-YO, EPA 8210-YP, EPA 8210-YQ, EPA 8210-YR, EPA 8210-YS, EPA 8210-YT, EPA 8210-YU, EPA 8210-YV, EPA 8210-YW, EPA 8210-YY, EPA 8210-YZ, EPA 8210-ZA, EPA 8210-ZB, EPA 8210-ZC, EPA 8210-ZD, EPA 8210-ZE, EPA 8210-ZF, EPA 8210-ZG, EPA 8210-ZH, EPA 8210-ZI, EPA 8210-ZJ, EPA 8210-ZK, EPA 8210-ZL, EPA 8210-ZM, EPA 8210-ZN, EPA 8210-ZO, EPA 8210-ZP, EPA 8210-ZQ, EPA 8210-ZR, EPA 8210-ZS, EPA 8210-ZT, EPA 8210-ZU, EPA 8210-ZV, EPA 8210-ZW, EPA 8210-ZX, EPA 8210-ZY, EPA 8210-ZZ

Prepared for:

**JOY ORGANICS**
**CHEW**


Batch ID or Lot Number: <b>21333A</b>	Test: <b>Microbial Contaminants</b>	Reported: <b>12/6/21</b>	Location: 5042 Technology Parkway Ste. 50 FT. COLLINS, CO 80528
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Matrix: Finished Product	Test ID: T000180159	Started: 12/3/21	USDA License: N/A
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Status: N/A	Methods: TM25 (qPCR) TM24, TM26, TM27(Culture Plating): Microbial (Colorado Panel)	Received: 12/03/2021 @ 10:51 AM	Sampler ID: N/A
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### MICROBIAL CONTAMINANTS DETERMINATION

Contaminant	Method	LOD	LLOQ	ULOQ	Result	Notes
<b>Total Aerobic Count*</b>	TM-26, Culture Plating	10 <sup>2</sup> CFU/g	10 <sup>3</sup> CFU/g	1.5x10 <sup>5</sup> CFU/g	4.2x10 <sup>3</sup> CFU/g	Free from visual mold, mildew, and foreign matter
<b>Total Coliforms*</b>	TM-27, Culture Plating	10 <sup>1</sup> CFU/g	10 <sup>2</sup> CFU/g	1.5x10 <sup>4</sup> CFU/g	None Detected	
<b>Total Yeast and Mold*</b>	TM-24, Culture Plating	10 <sup>1</sup> CFU/g	10 <sup>2</sup> CFU/g	1.5x10 <sup>4</sup> CFU/g	None Detected	
<b>E. coli (STEC)</b>	TM-25, PCR	1 CFU/25 g	NA	NA	Absent	
<b>Salmonella</b>	TM-25, PCR	1 CFU/25 g	NA	NA	Absent	

 Brett Hudson  
12/6/2021  
3:54:00 PM

 Carly Bader  
12/6/2021  
5:17:00 PM

PREPARED BY / DATE

APPROVED BY / DATE

#### Definitions

LOD = Limit of Detection | LLOQ = Lower Limit of Quantitation | ULOQ = Upper Limit of Quantitation

 CFU/g = Colony Forming Units per Gram | STEC = Shiga Toxin-Producing *E. coli*

\* 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<sup>2</sup> = 100 CFU  
 10<sup>3</sup> = 1,000 CFU  
 10<sup>4</sup> = 10,000 CFU  
 10<sup>5</sup> = 100,000 CFU

Testing results are based solely upon the sample submitted to Botanacor Laboratories, LLC, in the condition it was received. Botanacor Laboratories, LLC 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 Botanacor Laboratories, LLC.



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Certificate #4329.02