

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Joy Organics Strawberry Lemonade Gummies - Organic + Kosher Certified
PRODUCT STRENGTH: 25mg CBD / gummy
BATCH: 220517A
BEST BY DATE: 5/17/2024
EXTRACT LOT: 637

Physical Attributes

| Test | Method | Specification | Results |
|-------------------------|--------------|--|---------|
| Color | Joy Internal | Medium Pink | PASS |
| Odor | Joy Internal | Sweet, strawberry, lemon | PASS |
| Appearance | Joy Internal | Medium pink gummies with sugar coating in child proof container | PASS |
| Primary Package Eval. | Joy Internal | Container clean and free of filth. Container caps tight and seals intact | PASS |
| Secondary Package Eval. | Joy Internal | Labeling Compliance Checked, Sufficient cushion material exists. Box taped and secure. | PASS |

Review of Third-Party Analysis

| Panel | Method | Specification | Results* | Pass/Fail |
|---|-----------------|---|------------------|-----------|
| Potency - Total CBD | HPLC-UV DAD | *NLT 10 mg / gummy | 28.809mg | PASS |
| Potency - D9-THC | HPLC-UV DAD | LOQ: <0.01% (broad spectrum) | ND | PASS |
| Expanded Pesticide Panel | HPLC-QQQ | LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract | Below LOQ | PASS |
| Microbial Escherichia coli (STEC) | PCR | Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram | Absent | PASS |
| Microbial Salmonella | PCR | Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram | Absent | PASS |
| Microbial Yeast and Mold | Culture Plating | Complies with CDPHE 6 CCR 1010-21 - LOQ 10 ² CFU/gram | Below LOQ | PASS |
| Microbial Total Coliforms* | Culture Plating | Complies with CDPHE 6 CCR 1010-21 - LOQ 10 ² CFU/gram | Below LOQ | PASS |
| Microbial Total Aerobic Count* | Culture Plating | Complies with CDPHE 6 CCR 1010-21 - LOQ 10 ³ CFU/gram | Below LOQ | PASS |
| Heavy Metals Panel | ICP-MS | Arsenic (As): ≤1.5 ppm Cadmium (Cd): ≤0.5 ppm Lead (Pb): ≤0.5 ppm Mercury (Hg): ≤1.5 ppm | Below LOQ | PASS |
| Mycotoxins | ICP-MS | Total Aflatoxins <20 ppb† Aflatoxin B1 < 5 ppb Ochratoxin < 5ppb | Below LOQ | PASS |
| Residual Solvents | GC-HS-MSD | LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract | Below LOQ | PASS |

* *Level of Quantitation, † Parts Per Million ‡ Part Per Billion
 CFU/g=Colony Forming Units per Gram
 * Nothing Less Than
 10²=100 CFU
 10³=1,000 CFU

Quality Certified

Name

Kristen Mefford

5/20/2022

Date

25mg BS Strawberry Lemonade (organic)


| | | | |
|---------------------------------------|---------------------------------------|------------------------|-------------|
| Batch ID or Lot Number: 637 | Test, Test ID and Methods: Various | Matrix: Concentrate | Page 5 of 6 |
| Reported: 19May2022 | Started: 10May2022 | Received: 05May2022 | |


Cannabinoids - Colorado Compliance

Test ID: T000204001
Methods: TM14 (HPLC-DAD): Potency – Standard

| Cannabinoid Analysis | LOD (%) | LOQ (%) | Result (%) | Result (mg/g) | Notes |
|--|---------|---------|--------------|---------------|---|
| Cannabichromene (CBC) | 0.007 | 0.022 | ND | ND | Amendment to T000204001 issued 05May2022 to correct batch ID. |
| Cannabichromenic Acid (CBCA) | 0.007 | 0.020 | ND | ND | |
| Cannabidiol (CBD) | 0.017 | 0.056 | 0.873 | 8.73 | |
| Cannabidiolic Acid (CBDA) | 0.017 | 0.057 | ND | ND | |
| Cannabidivarin (CBDV) | 0.004 | 0.013 | <LOQ | 0.04 | |
| Cannabidivarinic Acid (CBDVA) | 0.007 | 0.024 | ND | ND | |
| Cannabigerol (CBG) | 0.004 | 0.012 | 0.095 | 0.95 | |
| Cannabigerolic Acid (CBGA) | 0.017 | 0.052 | ND | ND | |
| Cannabinol (CBN) | 0.005 | 0.016 | ND | ND | |
| Cannabinolic Acid (CBNA) | 0.012 | 0.035 | ND | ND | |
| Delta 8-Tetrahydrocannabinol (Delta 8-THC) | 0.020 | 0.062 | ND | ND | |
| Delta 9-Tetrahydrocannabinol (Delta 9-THC) | 0.018 | 0.056 | ND | ND | |
| Delta 9-Tetrahydrocannabinolic Acid (THCA-A) | 0.016 | 0.050 | ND | ND | |
| Tetrahydrocannabivarin (THCV) | 0.004 | 0.011 | ND | ND | |
| Tetrahydrocannabivarinic Acid (THCVA) | 0.014 | 0.044 | ND | ND | |
| Total Cannabinoids | | | 0.972 | 9.72 | |
| Total Potential THC | | | ND | ND | |
| Total Potential CBD | | | 0.873 | 8.73 | |

Final Approval


 Sam Smith
 19May2022
 02:25:00 PM MDT
 PREPARED BY / DATE


 Ryan Weems
 19May2022
 02:28:00 PM MDT
 APPROVED BY / DATE

25mg BS Strawberry Lemonade (organic)

| | | | |
|---------------------------------------|---------------------------------------|------------------------|-------------|
| Batch ID or Lot Number: 637 | Test, Test ID and Methods: Various | Matrix: Concentrate | Page 4 of 6 |
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Pesticides


Test ID: T000204002

Methods: TM17

| (LC-QQ LC MS/MS) | Dynamic Range (ppb) | Result (ppb) | | Dynamic Range (ppb) | Result (ppb) | |
|---------------------|---------------------|--------------|--|---------------------|--------------|----|
| Abamectin | 262 - 2803 | ND | | Malathion | 295 - 2716 | ND |
| Acephate | 40 - 2774 | ND | | Metalaxyl | 44 - 2747 | ND |
| Acetamiprid | 40 - 2750 | ND | | Methiocarb | 42 - 2784 | ND |
| Azoxystrobin | 46 - 2733 | ND | | Methomyl | 40 - 2754 | ND |
| Bifenazate | 44 - 2768 | ND | | MGK 264 1 | 172 - 1642 | ND |
| Boscalid | 49 - 2825 | ND | | MGK 264 2 | 116 - 1125 | ND |
| Carbaryl | 42 - 2730 | ND | | Myclobutanil | 48 - 2839 | ND |
| Carbofuran | 44 - 2708 | ND | | Naled | 49 - 2767 | ND |
| Chlorantraniliprole | 50 - 2794 | ND | | Oxamyl | 40 - 2763 | ND |
| Chlorpyrifos | 42 - 2806 | ND | | Paclobutrazol | 42 - 2729 | ND |
| Clofentezine | 280 - 2751 | ND | | Permethrin | 289 - 2752 | ND |
| Diazinon | 295 - 2773 | ND | | Phosmet | 46 - 2774 | ND |
| Dichlorvos | 280 - 2747 | ND | | Prophos | 288 - 2780 | ND |
| Dimethoate | 42 - 2738 | ND | | Propoxur | 44 - 2720 | ND |
| E-Fenpyroximate | 290 - 2748 | ND | | Pyridaben | 275 - 2783 | ND |
| Etofenprox | 43 - 2756 | ND | | Spinosad A | 36 - 2251 | ND |
| Etoxazole | 288 - 2744 | ND | | Spinosad D | 48 - 510 | ND |
| Fenoxycarb | 43 - 2750 | ND | | Spiromesifen | 267 - 2787 | ND |
| Fipronil | 39 - 2701 | ND | | Spirotetramat | 292 - 2679 | ND |
| Flonicamid | 49 - 2737 | ND | | Spiroxamine 1 | 19 - 1198 | ND |
| Fludioxonil | 294 - 2770 | ND | | Spiroxamine 2 | 24 - 1555 | ND |
| Hexythiazox | 45 - 2754 | ND | | Tebuconazole | 291 - 2779 | ND |
| Imazalil | 289 - 2784 | ND | | Thiacloprid | 41 - 2746 | ND |
| Imidacloprid | 44 - 2763 | ND | | Thiamethoxam | 42 - 2757 | ND |
| Kresoxim-methyl | 56 - 2820 | ND | | Trifloxystrobin | 44 - 2738 | ND |

Final Approval


 Ryan Weems
 19May2022
 02:12:00 PM MDT
 PREPARED BY / DATE


 Sam Smith
 19May2022
 02:25:00 PM MDT
 APPROVED BY / DATE

25mg BS Strawberry Lemonade (organic)


| | | | |
|---------------------------------------|---------------------------------------|------------------------|-------------|
| Batch ID or Lot Number: 637 | Test, Test ID and Methods: Various | Matrix: Concentrate | Page 6 of 6 |
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Microbial Contaminants - Colorado Compliance

Test ID: T000204003
 Methods: TM25 (qPCR) TM24, TM26, TM27 (Culture Plating): Microbial (Colorado Panel)

| | Method | LOD | Quantitation Range | Result | Notes |
|-----------------------|-----------------------|-------------------------|---|---------------|---|
| STEC | TM25: PCR | 10 ⁰ CFU/25g | NA | Absent | Free from visual mold, mildew, and foreign matter Amendment to report T000204003 for batch ID correction. SCH 19May2022 |
| 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


 Sarah Henning
 19May2022
 03:24:00 PM MDT
 PREPARED BY / DATE


 Carly Bader
 19May2022
 03:51:00 PM MDT
 APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/50c6d8c0-075c-469c-8b29-630d51dd8ca5>

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.

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. ISO/IEC 17025:2017 Accredited by A2LA. Some tests listed on this COA may not be within our scope of A2LA accreditation. Please visit [A2LA for more details](#).



Cert #4329.02
 50c6d8c0075c469c8b29630d51dd8ca5.1

25mg BS Strawberry Lemonade (organic)

| | | | |
|---------------------------------------|---------------------------------------|------------------------|-------------|
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**Heavy Metals -
Colorado Compliance**

Test ID: T000204004


Methods: TM19 (ICP-MS): Heavy

| Metals | Dynamic Range (ppm) | Result (ppm) | Notes |
|---------|---------------------|--------------|--|
| Arsenic | 0.05 - 4.67 | ND | Amendment to certificate T000204004 issued on 09May2022, batch ID updated. |
| Cadmium | 0.05 - 4.82 | ND | |
| Mercury | 0.05 - 4.54 | ND | |
| Lead | 0.03 - 3.04 | ND | |

Final Approval

Ryan Weems
19May2022
01:54:00 PM MDT

PREPARED BY / DATE



Sam Smith
19May2022
02:17:00 PM MDT

APPROVED BY / DATE

25mg BS Strawberry Lemonade (organic)


| | | | |
|---------------------------------------|---------------------------------------|------------------------|-------------|
| Batch ID or Lot Number: 637 | Test, Test ID and Methods: Various | Matrix: Concentrate | Page 1 of 6 |
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Mycotoxins - Colorado Compliance

Test ID: T000204006
Methods: TM18 (UHPLC-QQQ)
LCMS/MS: Mycotoxins

| | Dynamic Range (ppb) | Result (ppb) | Notes |
|---------------------------------------|---------------------|--------------|---|
| Ochratoxin A | 3.25 - 127.17 | ND | Amendment to T000204006 issued 11May2022 to correct batch ID. |
| Aflatoxin B1 | 1.36 - 32.94 | ND | N/A |
| Aflatoxin B2 | 1.49 - 32.94 | ND | |
| Aflatoxin G1 | 1.46 - 32.55 | ND | |
| Aflatoxin G2 | 1.59 - 32.61 | ND | |
| Total Aflatoxins (B1, B2, G1, and G2) | | ND | |

Final Approval


Samantha Smith
19May2022
11:27:00 AM MDT
PREPARED BY / DATE


Ryan Weems
19May2022
11:42:00 AM MDT
APPROVED BY / DATE

25mg BS Strawberry Lemonade (organic)

| | | | |
|---------------------------------------|---------------------------------------|------------------------|-------------|
| Batch ID or Lot Number: 637 | Test, Test ID and Methods: Various | Matrix: Concentrate | Page 2 of 6 |
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Residual Solvents - Colorado Compliance

Test ID: T000204005
Methods: TM04 (GC-MS): Residual Solvents

| Solvents | Dynamic Range (ppm) | Result (ppm) | Notes |
|-------------------------------|---------------------|--------------|--|
| Propane | 92 - 1841 | ND | Amendment to certificate T000204005 issued on 09May2022, batch ID updated. |
| Butanes (Isobutane, n-Butane) | 139 - 2778 | ND | |
| Methanol | 57 - 1143 | ND | |
| Pentane | 79 - 1579 | ND | |
| Ethanol | 80 - 1603 | >1603 | |
| Acetone | 89 - 1785 | ND | |
| Isopropyl Alcohol | 93 - 1860 | ND | |
| Hexane | 5 - 110 | ND | |
| Ethyl Acetate | 92 - 1848 | ND | |
| Benzene | 0.2 - 3.8 | ND | |
| Heptanes | 93 - 1855 | ND | |
| Toluene | 18 - 358 | ND | |
| Xylenes (m,p,o-Xylenes) | 121 - 2414 | ND | |

Final Approval


 Ryan Weems
 19May2022
 01:30:00 PM MDT
 PREPARED BY / DATE


 Sam Smith
 19May2022
 02:29:00 PM MDT
 APPROVED BY / DATE