



# JOY ORGANICS

## CERTIFICATE OF ANALYSIS

**PRODUCT NAME:** Joy Organics CBD Bath Bombs  
**PRODUCT STRENGTH:** 25 mg / each  
**BEST BY DATE:** 9/13/21  
**FILL LOT NUMBER:** 0056A  
**BATH BOMB LOT NUMBER:** 6750  
**HEMP EXTRACT LOT NUMBER\*:** [JP090319B7](#)

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

### Physical Attributes

| Test                    | Method  | Specification  | Results |
|-------------------------|---------|--|---------|
| Color                   | SOP-100 | White to slightly off-white  | PASS    |
| Odor                    | SOP-100 | Lavender   | PASS    |
| Appearance              | SOP-100 | Round, white to slightly off-white bath bombs in shrink wrap   | PASS    |
| Primary Package Eval.   | SOP-132 | Container clean and free of filth. Container caps tight and shrink bands intact                                  | PASS    |
| Secondary Package Eval. | SOP-132 | 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 |
|--------------------------------------|---------|---|-------------------------------|-----------|
| Potency - Total CBD                  | SOP-111 | 23.75-31.25 mg CBD / ea.<br>LOQ**: 10 PPM† (0.001%)   | <a href="#">.1% or 27.5mg</a> | PASS      |
| Potency - D9-THC                     | SOP-111 | None Detected LOQ: 10 PPM (0.001%)  | <a href="#">ND</a>            | PASS      |
| FL Compliant Pesticide Panel         | SOP-111 | Florida State Hemp Program<br>Rule 5B-57.014: Action Limits for Pesticides                        | <a href="#">ND</a>            | PASS      |
| Microbial - Stec E.Coli              | SOP-111 | Complies with USP 61/62   | <a href="#">Below LOQ</a>     | PASS      |
| Microbial - Salmonella               | SOP-111 | Complies with USP 61/62   | <a href="#">Below LOQ</a>     | PASS      |
| Microbial - Mold                     | SOP-111 | Complies with USP 61/62   | <a href="#">Below LOQ</a>     | PASS      |
| CA Compliant Heavy Metal Panel       | SOP-111 | Arsenic (As): ≤1.5 PPM<br>Cadmium (Cd): ≤0.5 PPM<br>Mercury (Hg): ≤1.0 PPM<br>Lead (Pb): ≤0.5 PPM | <a href="#">Below LOQ</a>     | PASS      |
| MT Compliant Residual Solvents Panel | SOP-111 | Montana Public Health and Human Services Rule 37.107.316  | <a href="#">Below LOQ</a>     | PASS      |

\* Level of Quantitation, † Parts Per Million

Quality Certified by: Darcie Moran 03.24.2020  
 Darcie Moran Date  
 Manager of Quality Assurance



**ACCU Bio-Chem**  
LABORATORIES

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Tel: 818.547.3221 Email: [acculab@accubclabs.com](mailto:acculab@accubclabs.com)  
[www.accubclabs.com](http://www.accubclabs.com)

To: **Joy Organics**  
5042 Technology Parkway, Suite 500  
Fort Collins, CO 80528

|                             |               |
|-----------------------------|---------------|
| COA No.:                    | M-JO031820-07 |
| COA Date:                   | 03/23/20      |
| Sample Rec'd Date:          | 03/18/20      |
| ISO/IEC 17025:2005 Standard | Page 1 of 1   |

## MICROBIOLOGICAL CERTIFICATE OF ANALYSIS

Sample Description: *Batch Bomb 0056A*  
 Sample Batch/Lot No.: *N/A*  
 ACCU Laboratory Ref.: *0726881*  
 Purchase Order No.: *N/A*  
 Test Method: *USP*  
 Notes: *N/A*

**Analysis:**

**Results:**

|   |                       |
|---|-----------------------|
| <b>Total Plate Count:</b>                     | <b>&lt;10 CFU / g</b> |
| <b>Yeast &amp; Mold Count:</b>                | <b>&lt;10 CFU / g</b> |
| <b>Bile-Tolerant g- Bacteria (coliforms):</b> | <b>Negative</b>       |
| <b><i>Escherichia coli</i>:</b>               | <b>Negative</b>       |
| <b><i>Salmonella</i>:</b>                     | <b>Negative</b>       |

Approved By: \_\_\_\_\_

Vano Baghdasarian, Laboratory Director

The results of this test relate only to the samples tested. This test report shall not be reproduced except in full, without written approval of the lab. ACCU Labs shall have no liability to anyone with respect to any interpretations or uses of the COA report, decisions made, or actions taken as a result of or based on the data reported.  
 Abbreviations: g -: gram negative; g +B: gram positive Bacilli; g +C: gram positive Cocci; TPC: Total Plate Count; TNTC: Too Numerous to Count

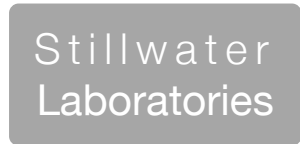
**Document Information**

|   |                                 |  |
|---|---------------------------------|--|
| <b>File Name and Version:</b> LF-510-01 Certificate of Analysis – V. Micro v.02 | <b>Effective Date:</b> 07/25/19 | <b>Status:</b> Approved by Vano Baghdasarian |
|---|---------------------------------|--|



total cannabinoids **0.1%**  
 CBD decarb total .12%  
 Δ9-THC ND

**This Product Has Been Tested and Complies with 7USC1639o(1) Definition of Hemp**

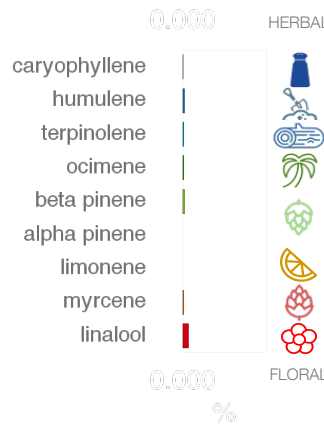


<https://portal.a2la.org/scopepdf/4961-01.pdf>

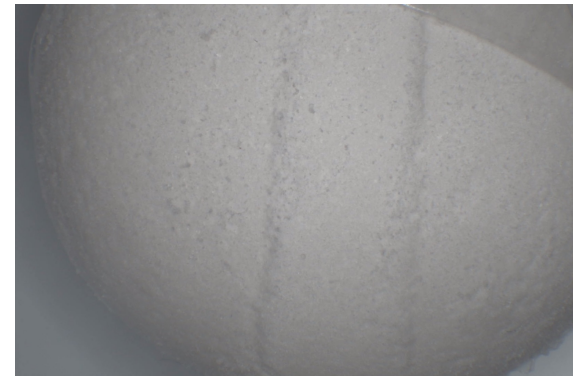
Sample Handling

test ID sample date 3/5/20 12:15 PM  
 order 6750 labID OCE43 weight 90.7 g  
 source

| Methods    | method       | equipment   |
|------------|--------------|-------------|
| weights    | MSP-7.3.1.3  | AUX120.1    |
| potency    | MSP-7.5.1.5  | LC-2030     |
| terpenes   | MSP-7.5.1.7  | QP2020/HS20 |
| pesticides | MSP-7.5.1.8  | LC-8060     |
| mycotoxins | MSP-7.5.1.8  | LC-8060     |
| microbial  | MSP-7.5.1.9  | Hardy Diag  |
| solvents   | MSP-7.5.1.6  | QP2020/HS20 |
| metals     | MSP-7.5.1.10 | ICPMS2030   |



topical



| Potency   | %    | estimated error | Terpenes        | %      | estimated error | %                      | estimated error | %          | estimated error |        |                |
|---|------|-----------------|-----------------|--------|-----------------|------------------------|-----------------|------------|-----------------|--------|----------------|
| tetrahydrocannabinolic acid (THCa)                        | ND   | ± 0.02 %        | β-myrcene       | 0.003% | ± 0.0017%       | camphene               | 0.000%          | ± 0.0016 % | guaiol          | 0.000% | ± 0.0016 %     |
| Δ <sup>9</sup> -tetrahydrocannabinol (Δ <sup>9</sup> THC) | ND   | ± 0.02 %        | β-caryophyllene | 0.001% | ± 0.0017%       | Δ <sup>3</sup> -carene | 0.003%          | ± 0.0017 % | β-bisabolol     | 0.002% | ± 0.0017 %     |
| Δ <sup>8</sup> -tetrahydrocannabinol (Δ <sup>8</sup> THC) | ND   | ± 0.02 %        | alpha-pinene    | 0.000% | ± 0.0016%       | a-terpinene            | 0.000%          | ± 0.0016 % | eucalyptol      | 0.000% | ± 0.0016 %     |
| tetrahydrocannabivarin (THCv)                             | 0%   | ± 0.02 %        | β-pinene        | 0.006% | ± 0.0018%       | para-cymene            | 0.013%          | ± 0.0020 % |                 |        |                |
| cannabidiolic acid (CBDA)                                 | ND   | ± 0.02 %        | D-limonene      | 0.000% | ± 0.0016%       | g-terpinene            | 0.011%          | ± 0.0020 % |                 |        |                |
| cannabidiol (CBD)   | .12% | ± 0.04 %        | linalool        | 0.031% | ± 0.0025%       | (-)-isopulegol         | 0.000%          | ± 0.0016 % |                 |        | total terpenes |
| cannabidivarin (CBDv)                                     | ND   | ± 0.02 %        | ocimene         | 0.003% | ± 0.0035%       | geraniol               | 0.003%          | ± 0.0017 % |                 |        | 0.09%          |
| cannabigerolic acid (CBGA)                                | ND   | ± 0.02 %        | terpinolene     | 0.005% | ± 0.0018%       | cis-nerolidol          | 0.000%          | ± 0.0016 % |                 |        |                |
| cannabigerol (CBG)  | 0%   | ± 0.02 %        | alpha-humulene  | 0.008% | ± 0.0019%       | trans-nerolidol        | 0.000%          | ± 0.0016 % |                 |        |                |
| cannabinol (CBN)  | ND   | ± 0.02 %        |                 |        |                 |                        |                 |            |                 |        |                |
| cannabichromene (CBC)                                     | 0%   | ± 0.02 %        |                 |        |                 |                        |                 |            |                 |        |                |

| Solvents        | MT limit | OCE43 | LOQ     | Pesticides (MT) | MT limit | OCE43 | LOQ    | Pesticides (other) | OCE43    | LOQ    |
|-----------------|----------|-------|---------|-----------------|----------|-------|--------|--------------------|----------|--------|
| propane         | 5,000    | PASS  | <10ppm  | abamectin       |          |       | <10ppb | acephate           | 0.00 ppm | <10ppb |
| butanes         | 5,000    | PASS  | <10ppm  | acequinocyl     |          |       | <10ppb | acetamidrid        | 0.00 ppm | <10ppb |
| pentanes        | 5,000    | PASS  | <10ppm  | bifenazate      |          |       | <10ppb | aldicarb           | 0.00 ppm | <10ppb |
| hexanes         | 290      | PASS  | <10ppm  | bifenthrin      |          |       | <10ppb | azoxystrobin       | 0.00 ppm | <10ppb |
| cyclohexane     | 3,880    | PASS  | <10ppm  | chlormequat cl. |          |       | <10ppb | boscalid           | 0.00 ppm | <10ppb |
| heptanes        | 5,000    | PASS  | <10ppm  | cyfluthrin      |          |       | <80ppb | carbaryl           | 0.00 ppm | <10ppb |
| methanol        | 3,000    | PASS  | <10ppm  | diaminozide     |          |       | <10ppb | carbofuran         | 0.00 ppm | <10ppb |
| isopropanol     | 5,000    | PASS  | <10ppm  | etoxazole       |          |       | <10ppb | chloantranilprole  | 0.00 ppm | <10ppb |
| acetone         | 5,000    | PASS  | <10ppm  | fenoxycarb      |          |       | <10ppb | chlorpyrifos       | 0.00 ppm | <10ppb |
| ethyl acetate   | 5,000    | PASS  | <10ppm  | imazalil        |          |       | <10ppb | clofentezine       | 0.00 ppm | <10ppb |
| benzene         | 2        | PASS  | <0.2ppm | imidacloprid    |          |       | <10ppb | cypermethrin       | 0.00 ppm | <10ppb |
| toluene         | 890      | PASS  | <10ppm  | myclobutanil    |          |       | <10ppb | diazinon           | 0.00 ppm | <10ppb |
| xylenes         | 2,170    | PASS  | <10ppm  | paclobutrazol   |          |       | <10ppb | dichlorvos         | 0.00 ppm | <10ppb |
| chloroform      | 2        | PASS  | <0.2ppm | pyrethrins      |          |       | <10ppb | dimethoate         | 0.00 ppm | <10ppb |
| dichloromethane | 600      | PASS  | <10ppm  | spinosad        |          |       | <10ppb | etofenprox         | 0.00 ppm | <10ppb |
|                 |          |       |         | spiromesifen    |          |       | <10ppb | fenpyroximate      | 0.00 ppm | <10ppb |
|                 |          |       |         | spirotetramat   |          |       | <10ppb | fipronil           | 0.00 ppm | <10ppb |
|                 |          |       |         | trifloxystrobin |          |       | <10ppb | flonicamid         | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | fludioxonil        | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | hexythiazox        | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | kresoxym-methyl    | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | malathion          | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | metalaxyl          | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | methiocarb         | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | methomyl           | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | oxamyl             | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | permethrins        | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | phosmet            | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | piperonyl butoxide | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | prallethrin        | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | propiconazole      | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | pyridaben          | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | spiroxamine        | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | tebuconazole       | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | thiacloprid        | 0.00 ppm | <10ppb |
|                 |          |       |         |                 |          |       |        | thiamethoxam       | 0.00 ppm | <10ppb |

| Toxic Metals | MT limit | OCE43 | LOQ    |
|--------------|----------|-------|--------|
| arsenic      | 2 ppm    | PASS  | <10ppb |
| cadmium      | 4.1 ppm  | PASS  | <10ppb |
| lead         | 1.2 ppm  | PASS  | <10ppb |
| mercury      | 0.4 ppm  | PASS  | <10ppb |

| Microbial             | MT limit  | OCE43 | LOQ        |
|-----------------------|-----------|-------|------------|
| <i>E. coli</i>        | 10 CFU    | PASS  | <10 CFU/g  |
| Salmonella sp.        | 10 CFU    | PASS  | <10 CFU/g  |
| molds                 | 10000 CFU | PASS  | <10k CFU/g |
| Aflatoxin B1,B2,G1,G2 | 20 ppb    | PASS  | <20 ppb    |
| Ochratoxin A          | 20 ppb    | PASS  | <20 ppb    |

• All testing was completed onsite at 6073 US93N, Olney MT • Potency (cannabinoid concentration) is calculated from the equation: [cannabinoid] = [cannabinoid]<sub>HPLC</sub> x volume<sub>dilution</sub> / m<sub>dry</sub>. Terpene concentration is calculated from the equation: [terpene] = (terpene mass)<sub>GCMS</sub> / m<sub>dry</sub>. •• Decarboxyted cannabinoid concentration is calculated from the equation XXX<sub>total</sub> = 0.877 x XXX<sub>a</sub> + XXX ••• Standards are used to calibrate the resulting data and estimate error using a standard estimate of error method; this is combined with error from weighing and dilution using the propagation of error formula s<sub>g</sub><sup>2</sup> = Σ(∂f/∂i)<sup>2</sup>s<sub>i</sub><sup>2</sup> where i is the contributor to error. The 95% confidence range is calculated from the equation: (concentration) ± t<sub>CL90</sub> x s<sub>g</sub>. Sampling error is not

Certified by:  
  
 Kyle Larson, MSc (Biology)  
 Deputy Director  
 6073 US93N, Olney MT 59927  
 406-881-2019 rdb@stwlabs.com



This is an amended version of report# 19-012757/D02.R00.  
Reason: Updated report formatting.

**Product identity:** JP090319B7  
**Laboratory ID:** 19-012757-0002

**Client/Metric ID:** .  
**Sample Date:**

**Summary**

**Potency:**

| Analyte | Result (%) |  |  |           |          |
|---------|------------|--|--|-----------|----------|
| CBD     | 81.9       |  | <ul style="list-style-type: none"> <li><span style="color: red;">●</span> CBD</li> <li><span style="color: blue;">●</span> CBDV</li> </ul> | CBD-Total | 81.9%    |
| CBDV†   | 1.86       |  |  | THC-Total | < 0.177% |
|         |            |  | (Reported in percent of total sample)  |           |          |

**Residual Solvents:**

All analytes passing and less than LOQ.

**Pesticides:**

All analytes passing and less than LOQ.

**Terpenes:**

| Analyte                | Percent by weight | Percent of Total | Analyte                  | Percent by weight | Percent of Total |
|------------------------|-------------------|------------------|--------------------------|-------------------|------------------|
| (-)-Guaiol†            | 0.619             | 35.17%           | (-)-caryophyllene oxide† | 0.511             | 29.03%           |
| β-Caryophyllene†       | 0.450             | 25.57%           | Humulene†                | 0.0795            | 4.52%            |
| Linalool†              | 0.0594            | 3.38%            | (-)-a-Terpineol†         | 0.0411            | 2.34%            |
| <b>Total Terpenes†</b> | <b>1.76</b>       | <b>100.00%</b>   |                          |                   |                  |

**Metals:**

Less than LOQ for all analytes.

**Microbiology:**

Less than LOQ for all analytes.



**Customer:** My CBD Test

**Product identity:** JP090319B7

**Client/Metric ID:** .

**Sample Date:**

**Laboratory ID:** 19-012757-0002

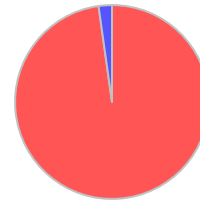
**Relinquished by:** UPS

**Temp:** 23.4 °C

### Sample Results

Potency Method J AOAC 2015 V98-6 Units % Batch 1909717 Analyze 10/22/19 05:04 PM

| Analyte     | As Received | Dry weight | LOQ    | Notes |
|-------------|-------------|------------|--------|-------|
| CBC†        | < LOQ       |            | 0.0943 |       |
| CBC-A†      | < LOQ       |            | 0.0943 |       |
| CBC-Total†  | < LOQ       |            | 0.177  |       |
| CBD         | 81.9        |            | 0.943  |       |
| CBD-A       | < LOQ       |            | 0.0943 |       |
| CBD-Total   | 81.9        |            | 1.03   |       |
| CBDV†       | 1.86        |            | 0.0943 |       |
| CBDV-A†     | < LOQ       |            | 0.0943 |       |
| CBDV-Total† | 1.86        |            | 0.176  |       |
| CBG†        | < LOQ       |            | 0.0943 |       |
| CBG-A†      | < LOQ       |            | 0.0943 |       |
| CBG-Total†  | < LOQ       |            | 0.176  |       |
| CBL†        | < LOQ       |            | 0.0943 |       |
| CBN         | < LOQ       |            | 0.0943 |       |
| Δ8-THC†     | < LOQ       |            | 0.0943 |       |
| Δ9-THC      | < LOQ       |            | 0.0943 |       |
| THC-A       | < LOQ       |            | 0.0943 |       |
| THC-Total   | < LOQ       |            | 0.177  |       |
| THCV†       | < LOQ       |            | 0.0943 |       |
| THCV-A†     | < LOQ       |            | 0.0943 |       |
| THCV-Total† | < LOQ       |            | 0.176  |       |



● CBD  
● CBDV

### Microbiology

| Analyte                 | Result | Limits | Units | LOQ | Batch   | Analyze  | Method                  | Notes |
|-------------------------|--------|--------|-------|-----|---------|----------|-------------------------|-------|
| E.coli                  | < LOQ  |        | cfu/g | 10  | 1909486 | 10/21/19 | AOAC 991.14 (Petrifilm) | X     |
| Total Coliforms         | < LOQ  |        | cfu/g | 10  | 1909486 | 10/21/19 | AOAC 991.14 (Petrifilm) | X     |
| Mold (RAPID Petrifilm)  | < LOQ  |        | cfu/g | 10  | 1909487 | 10/21/19 | AOAC 2014.05 (RAPID)    | X     |
| Yeast (RAPID Petrifilm) | < LOQ  |        | cfu/g | 10  | 1909487 | 10/21/19 | AOAC 2014.05 (RAPID)    | X     |



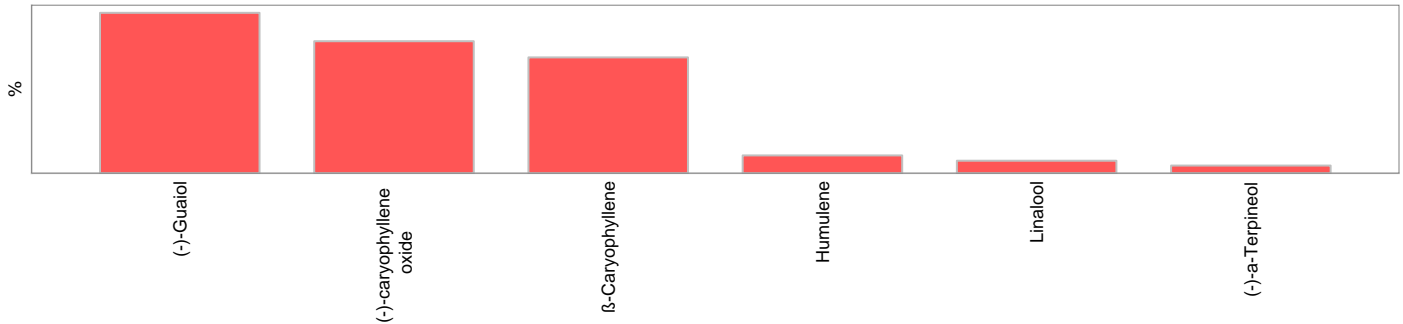
| Solvents           |        |        |      |        | Method EPA5021A | Units µg/g              | Batch 1909460 | Analyze 10/23/19 02:28 PM |      |        |       |
|--------------------|--------|--------|------|--------|-----------------|-------------------------|---------------|---------------------------|------|--------|-------|
| Analyte            | Result | Limits | LOQ  | Status | Notes           | Analyte                 | Result        | Limits                    | LOQ  | Status | Notes |
| 1,4-Dioxane        | < LOQ  | 380    | 100  | pass   |                 | 2-Butanol               | < LOQ         | 5000                      | 200  | pass   |       |
| 2-Ethoxyethanol    | < LOQ  | 160    | 30.0 | pass   |                 | 2-Methylbutane          | < LOQ         |                           | 200  |        |       |
| 2-Methylpentane    | < LOQ  |        | 30.0 |        |                 | 2-Propanol (IPA)        | < LOQ         | 5000                      | 200  | pass   |       |
| 2,2-Dimethylbutane | < LOQ  |        | 30.0 |        |                 | 2,2-Dimethylpropane     | < LOQ         |                           | 200  |        |       |
| 2,3-Dimethylbutane | < LOQ  |        | 30.0 |        |                 | 3-Methylpentane         | < LOQ         |                           | 30.0 |        |       |
| Acetone            | < LOQ  | 5000   | 200  | pass   |                 | Acetonitrile            | < LOQ         | 410                       | 100  | pass   |       |
| Benzene            | < LOQ  | 2.00   | 1.00 | pass   |                 | Butanes (sum)           | < LOQ         | 5000                      | 400  | pass   |       |
| Cyclohexane        | < LOQ  | 3880   | 200  | pass   |                 | Ethyl acetate           | < LOQ         | 5000                      | 200  | pass   |       |
| Ethyl benzene      | < LOQ  |        | 200  |        |                 | Ethyl ether             | < LOQ         | 5000                      | 200  | pass   |       |
| Ethylene glycol    | < LOQ  | 620    | 200  | pass   |                 | Ethylene oxide          | < LOQ         | 50.0                      | 30.0 | pass   |       |
| Hexanes (sum)      | < LOQ  | 290    | 150  | pass   |                 | Isopropyl acetate       | < LOQ         | 5000                      | 200  | pass   |       |
| Isopropylbenzene   | < LOQ  | 70.0   | 30.0 | pass   |                 | m,p-Xylene              | < LOQ         |                           | 200  |        |       |
| Methanol           | < LOQ  | 3000   | 200  | pass   |                 | Methylene chloride      | < LOQ         | 600                       | 200  | pass   |       |
| Methylpropane      | < LOQ  |        | 200  |        |                 | n-Butane                | < LOQ         |                           | 200  |        |       |
| n-Heptane          | < LOQ  | 5000   | 200  | pass   |                 | n-Hexane                | < LOQ         |                           | 30.0 |        |       |
| n-Pentane          | < LOQ  |        | 200  |        |                 | o-Xylene                | < LOQ         |                           | 200  |        |       |
| Pentanes (sum)     | < LOQ  | 5000   | 600  | pass   |                 | Propane                 | < LOQ         | 5000                      | 200  | pass   |       |
| Tetrahydrofuran    | < LOQ  | 720    | 100  | pass   |                 | Toluene                 | < LOQ         | 890                       | 100  | pass   |       |
| Total Xylenes      | < LOQ  |        | 400  |        |                 | Total Xylenes and Ethyl | < LOQ         | 2170                      | 600  | pass   |       |



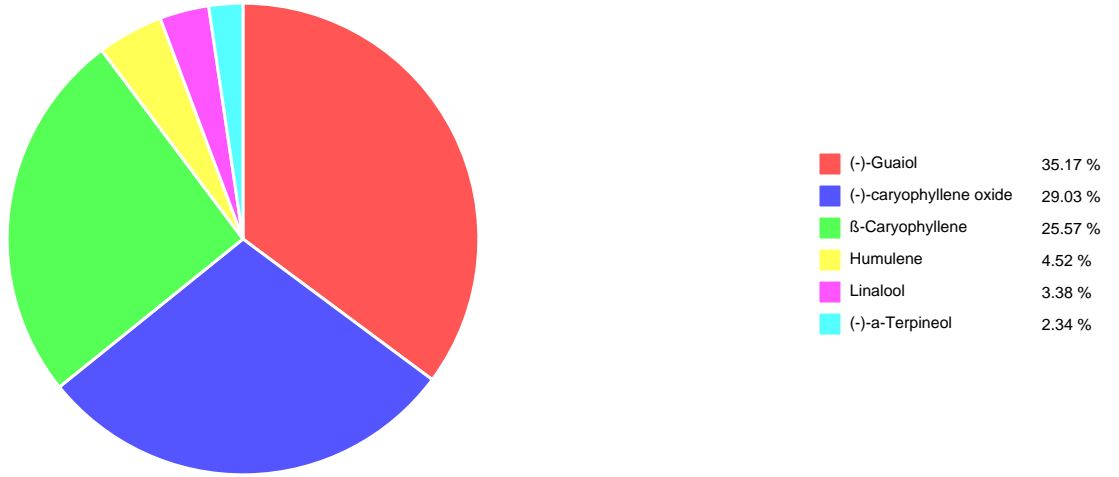
| Pesticides   |        |        |       |        |       |                     |        |        |       |        |       |
|--|--------|--------|-------|--------|-------|---------------------|--------|--------|-------|--------|-------|
| Method AOAC 2007.01 & EN 15662 (mod) Units mg/kg Batch 1909507 Analyze 10/21/19 09:49 AM |        |        |       |        |       |                     |        |        |       |        |       |
| Analyte  | Result | Limits | LOQ   | Status | Notes | Analyte             | Result | Limits | LOQ   | Status | Notes |
| Abamectin  | < LOQ  | 0.50   | 0.250 | pass   |       | Acephate            | < LOQ  | 0.40   | 0.250 | pass   |       |
| Acequinocyl  | < LOQ  | 2.0    | 1.00  | pass   |       | Acetamiprid         | < LOQ  | 0.20   | 0.100 | pass   |       |
| Aldicarb   | < LOQ  | 0.40   | 0.200 | pass   |       | Azoxystrobin        | < LOQ  | 0.20   | 0.100 | pass   |       |
| Bifenazate   | < LOQ  | 0.20   | 0.100 | pass   |       | Bifenthrin          | < LOQ  | 0.20   | 0.100 | pass   |       |
| Boscalid   | < LOQ  | 0.40   | 0.200 | pass   |       | Carbaryl            | < LOQ  | 0.20   | 0.100 | pass   |       |
| Carbofuran   | < LOQ  | 0.20   | 0.100 | pass   |       | Chlorantraniliprole | < LOQ  | 0.20   | 0.100 | pass   |       |
| Chlorfenapyr   | < LOQ  | 1.0    | 0.500 | pass   |       | Chlorpyrifos        | < LOQ  | 0.20   | 0.100 | pass   |       |
| Clofentezine   | < LOQ  | 0.20   | 0.100 | pass   |       | Cyfluthrin          | < LOQ  | 1.0    | 0.500 | pass   |       |
| Cypermethrin   | < LOQ  | 1.0    | 0.500 | pass   |       | Daminozide          | < LOQ  | 1.0    | 0.500 | pass   |       |
| Diazinon   | < LOQ  | 0.20   | 0.100 | pass   |       | Dichlorvos          | < LOQ  | 1.0    | 0.500 | pass   |       |
| Dimethoate   | < LOQ  | 0.20   | 0.100 | pass   |       | Ethoprophos         | < LOQ  | 0.20   | 0.100 | pass   |       |
| Etofenprox   | < LOQ  | 0.40   | 0.200 | pass   |       | Etoazole            | < LOQ  | 0.20   | 0.100 | pass   |       |
| Fenoxycarb   | < LOQ  | 0.20   | 0.100 | pass   |       | Fenpyroximate       | < LOQ  | 0.40   | 0.200 | pass   |       |
| Fipronil   | < LOQ  | 0.40   | 0.200 | pass   |       | Fonicamid           | < LOQ  | 1.0    | 0.400 | pass   |       |
| Fludioxonil  | < LOQ  | 0.40   | 0.200 | pass   |       | Hexythiazox         | < LOQ  | 1.0    | 0.400 | pass   |       |
| Imazalil   | < LOQ  | 0.20   | 0.100 | pass   |       | Imidacloprid        | < LOQ  | 0.40   | 0.200 | pass   |       |
| Kresoxim-methyl  | < LOQ  | 0.40   | 0.200 | pass   |       | Malathion           | < LOQ  | 0.20   | 0.100 | pass   |       |
| Metalaxyl  | < LOQ  | 0.20   | 0.100 | pass   |       | Methiocarb          | < LOQ  | 0.20   | 0.100 | pass   |       |
| Methomyl   | < LOQ  | 0.40   | 0.200 | pass   |       | MGK-264             | < LOQ  | 0.20   | 0.100 | pass   |       |
| Myclobutanil   | < LOQ  | 0.20   | 0.100 | pass   |       | Naled               | < LOQ  | 0.50   | 0.250 | pass   |       |
| Oxamyl   | < LOQ  | 1.0    | 0.500 | pass   |       | Paclbutrazole       | < LOQ  | 0.40   | 0.200 | pass   |       |
| Parathion-Methyl   | < LOQ  | 0.20   | 0.200 | pass   |       | Permethrin          | < LOQ  | 0.20   | 0.100 | pass   |       |
| Phosmet  | < LOQ  | 0.20   | 0.100 | pass   |       | Piperonyl butoxide  | < LOQ  | 2.0    | 1.00  | pass   |       |
| Prallethrin  | < LOQ  | 0.20   | 0.200 | pass   |       | Propiconazole       | < LOQ  | 0.40   | 0.200 | pass   |       |
| Propoxur   | < LOQ  | 0.20   | 0.100 | pass   |       | Pyrethrin I (total) | < LOQ  | 1.0    | 0.500 | pass   |       |
| Pyridaben  | < LOQ  | 0.20   | 0.100 | pass   |       | Spinosad            | < LOQ  | 0.20   | 0.100 | pass   |       |
| Spiromesifen   | < LOQ  | 0.20   | 0.100 | pass   |       | Spirotetramat       | < LOQ  | 0.20   | 0.100 | pass   |       |
| Spiroxamine  | < LOQ  | 0.40   | 0.200 | pass   |       | Tebuconazole        | < LOQ  | 0.40   | 0.200 | pass   |       |
| Thiacloprid  | < LOQ  | 0.20   | 0.100 | pass   |       | Thiamethoxam        | < LOQ  | 0.20   | 0.100 | pass   |       |
| Trifloxystrobin  | < LOQ  | 0.20   | 0.100 | pass   |       |                     |        |        |       |        |       |



| Terpenes                      |             |       |            | Method J AOAC 2015 V98-6 | Units %                              | Batch 1909461 | Analyze 10/18/19 12:07 PM |            |       |
|-------------------------------|-------------|-------|------------|--------------------------|--------------------------------------|---------------|---------------------------|------------|-------|
| Analyte                       | Result      | LOQ   | % of Total | Notes                    | Analyte                              | Result        | LOQ                       | % of Total | Notes |
| (-)-Guaial <sup>†</sup>       | 0.619       | 0.020 | 35.17%     |                          | (-)-caryophyllene oxide <sup>†</sup> | 0.511         | 0.020                     | 29.03%     |       |
| β-Caryophyllene <sup>†</sup>  | 0.450       | 0.020 | 25.57%     |                          | Humulene <sup>†</sup>                | 0.0795        | 0.020                     | 4.52%      |       |
| Linalool <sup>†</sup>         | 0.0594      | 0.020 | 3.38%      |                          | (-)-a-Terpeneol <sup>†</sup>         | 0.0411        | 0.020                     | 2.34%      |       |
| (-)-Isopulegol <sup>†</sup>   | < LOQ       | 0.020 | 0.00%      |                          | (-)-β-Pinene <sup>†</sup>            | < LOQ         | 0.020                     | 0.00%      |       |
| (+)-Borneol <sup>†</sup>      | < LOQ       | 0.020 | 0.00%      |                          | (+)-Cedrol <sup>†</sup>              | < LOQ         | 0.020                     | 0.00%      |       |
| (+)-fenchol <sup>†</sup>      | < LOQ       | 0.020 | 0.00%      |                          | (+)-Pulegone <sup>†</sup>            | < LOQ         | 0.020                     | 0.00%      |       |
| (±)-Camphor <sup>†</sup>      | < LOQ       | 0.020 | 0.00%      |                          | (±)-cis-Nerolidol <sup>†</sup>       | < LOQ         | 0.020                     | 0.00%      |       |
| (±)-fenchone <sup>†</sup>     | < LOQ       | 0.020 | 0.00%      |                          | (±)-trans-Nerolidol <sup>†</sup>     | < LOQ         | 0.020                     | 0.00%      |       |
| (R)-(+)-Limonene <sup>†</sup> | < LOQ       | 0.020 | 0.00%      |                          | a-Bisabolol <sup>†</sup>             | < LOQ         | 0.020                     | 0.00%      |       |
| a-cedrene <sup>†</sup>        | < LOQ       | 0.020 | 0.00%      |                          | a-phellandrene <sup>†</sup>          | < LOQ         | 0.020                     | 0.00%      |       |
| a-pinene <sup>†</sup>         | < LOQ       | 0.020 | 0.00%      |                          | a-Terpinene <sup>†</sup>             | < LOQ         | 0.020                     | 0.00%      |       |
| Camphene <sup>†</sup>         | < LOQ       | 0.020 | 0.00%      |                          | cis-β-Ocimene <sup>†</sup>           | < LOQ         | 0.006                     | 0.00%      |       |
| d-3-Carene <sup>†</sup>       | < LOQ       | 0.020 | 0.00%      |                          | Eucalyptol <sup>†</sup>              | < LOQ         | 0.020                     | 0.00%      |       |
| farnesene <sup>†</sup>        | < LOQ       | 0.020 | 0.00%      |                          | gamma-Terpinene <sup>†</sup>         | < LOQ         | 0.020                     | 0.00%      |       |
| Geraniol <sup>†</sup>         | < LOQ       | 0.020 | 0.00%      |                          | Geranyl acetate <sup>†</sup>         | < LOQ         | 0.020                     | 0.00%      |       |
| Isoborneol <sup>†</sup>       | < LOQ       | 0.020 | 0.00%      |                          | Menthol <sup>†</sup>                 | < LOQ         | 0.020                     | 0.00%      |       |
| nerol <sup>†</sup>            | < LOQ       | 0.020 | 0.00%      |                          | p-Cymene <sup>†</sup>                | < LOQ         | 0.020                     | 0.00%      |       |
| Sabinene <sup>†</sup>         | < LOQ       | 0.020 | 0.00%      |                          | Sabinene hydrate <sup>†</sup>        | < LOQ         | 0.020                     | 0.00%      |       |
| β-Myrcene <sup>†</sup>        | < LOQ       | 0.020 | 0.00%      |                          | Terpinolene <sup>†</sup>             | < LOQ         | 0.020                     | 0.00%      |       |
| trans-β-Ocimene <sup>†</sup>  | < LOQ       | 0.013 | 0.00%      |                          | valencene <sup>†</sup>               | < LOQ         | 0.020                     | 0.00%      |       |
| <b>Total Terpenes</b>         | <b>1.76</b> |       |            |                          |                                      |               |                           |            |       |







**Metals**

| Analyte | Result | Limits | Units | LOQ   | Batch   | Analyze  | Method              | Notes |
|---------|--------|--------|-------|-------|---------|----------|---------------------|-------|
| Arsenic | < LOQ  |        | mg/kg | 0.100 | 1909726 | 10/25/19 | AOAC 2013.06 (mod.) | X     |
| Cadmium | < LOQ  |        | mg/kg | 0.100 | 1909726 | 10/25/19 | AOAC 2013.06 (mod.) | X     |
| Lead    | < LOQ  |        | mg/kg | 0.100 | 1909726 | 10/25/19 | AOAC 2013.06 (mod.) | X     |
| Mercury | < LOQ  |        | mg/kg | 0.100 | 1909726 | 10/25/19 | AOAC 2013.06 (mod.) | X     |



These test results are representative of the individual sample selected and submitted by the client.

**Abbreviations**

**Limits:** Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220

**Limit(s) of Quantitation (LOQ):** The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

† = Analyte not NELAP accredited.

**Units of Measure**

cfu/g = Colony forming units per gram

µg/g = Microgram per gram

mg/kg = Milligram per kilogram = parts per million (ppm)

% = Percentage of sample

% wt = µg/g divided by 10,000

**Glossary of Qualifiers**

X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner  
General Manager