

**Essential CBD Formula**

|                  |                        |                 |                                   |
|------------------|------------------------|-----------------|-----------------------------------|
| <b>Batch ID:</b> | 0720750                | <b>Test ID:</b> | 8668562.013                       |
| <b>Reported:</b> | 15-Aug-2019            | <b>Method:</b>  | Edible - Test Methods: TM05, TM06 |
| <b>Type:</b>     | Edible                 |                 |                                   |
| <b>Test:</b>     | Microbial Contaminants |                 |                                   |

**MICROBIAL CONTAMINANTS**

| Contaminant                    | Result (CFU/g)* |
|--------------------------------|-----------------|
| <b>Total Aerobic Count**</b>   | None Detected   |
| <b>Total Coliforms**</b>       | None Detected   |
| <b>Total Yeast and Molds**</b> | None Detected   |
| <b>E. coli</b>                 | None Detected   |
| <b>Salmonella</b>              | None Detected   |

\* CFU/g = Colony Forming Unit 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.

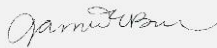

Examples:  $10^2 = 100$  CFU  
 $10^3 = 1,000$  CFU  
 $10^4 = 10,000$  CFU  
 $10^5 = 100,000$  CFU**NOTES:**

Free from visual mold, mildew, and foreign matter

TYM: None Detected

Total Aerobic: None Detected

Coliforms: None Detected

**FINAL APPROVAL**  
Jamie Bunker  
15-Aug-2019  
2:16 PM  
David Green  
15-Aug-2019  
2:45 PM

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

**ESSENTIAL CBD FORMULA**

|                  |                   |                 |             |
|------------------|-------------------|-----------------|-------------|
| <b>Batch ID:</b> | 0720750           | <b>Test ID:</b> | 5207044.037 |
| <b>Reported:</b> | 13-Aug-2019       | <b>Method:</b>  | TM04        |
| <b>Type:</b>     | Concentrate       |                 |             |
| <b>Test:</b>     | Residual Solvents |                 |             |



**RESIDUAL SOLVENTS**

| Solvent                                 | Reportable Range (ppm) | Result (ppm) |
|---|------------------------|--------------|
| <b>Propane</b>                          | 100 - 2000             | 0            |
| <b>Butanes</b><br>(Isobutane, n-Butane) | 100 - 2000             | 0            |
| <b>Pentane</b>                          | 100 - 2000             | 0            |
| <b>Ethanol</b>                          | 100 - 2000             | 0            |
| <b>Acetone</b>                          | 100 - 2000             | 0            |
| <b>Isopropyl Alcohol</b>                | 100 - 2000             | 0            |
| <b>Hexane</b>                           | 6 - 120                | 0            |
| <b>Benzene</b>                          | 0.2 - 4                | 0.0          |
| <b>Heptanes</b>                         | 100 - 2000             | 0            |
| <b>Toluene</b>                          | 18 - 360               | 0            |
| <b>Xylenes</b><br>(m,p,o-Xylenes)       | 43 - 860               | 0            |

**NOTES:**

Free from visual mold, mildew, and foreign matter.

**FINAL APPROVAL**

|   |   |
|---|---|
| <br>Sam Smith<br>13-Aug-2019<br>6:25 AM | <br>Greg Zimpfer<br>13-Aug-2019<br>7:45 AM |
|---|---|

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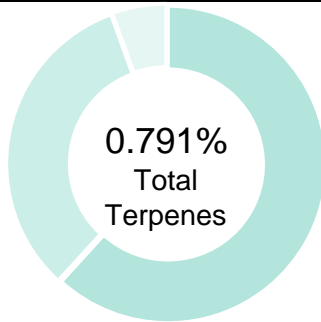
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Certificate #4329.02

**Essential CBD Formula**

|                  |             |                 |             |
|------------------|-------------|-----------------|-------------|
| <b>Batch ID:</b> | 0720750     | <b>Test ID:</b> | 2497541.003 |
| <b>Reported:</b> | 13-Aug-2019 | <b>Method:</b>  | TM10        |
| <b>Type:</b>     | Concentrate |                 |             |
| <b>Test:</b>     | Terpenes    |                 |             |


**TERPENE PROFILE**


| Compound                | %(w/w)        | mg/g        |
|-------------------------|---------------|-------------|
| (-)-alpha-Bisabolol     | 0.039         | 0.39        |
| Camphene                | 0.000         | 0           |
| delta-3-Carene          | 0.000         | 0           |
| beta-Caryophyllene      | 0.436         | 4.36        |
| (-)-Caryophyllene Oxide | 0.085         | 0.85        |
| p-Cymene                | 0.000         | 0           |
| Eucalyptol              | 0.000         | 0           |
| Geraniol                | 0.000         | 0           |
| alpha-Humulene          | 0.231         | 2.31        |
| (-)-Isopulegol          | 0.000         | 0           |
| d-Limonene              | 0.000         | 0           |
| Linalool                | 0.000         | 0           |
| beta-Myrcene            | 0.000         | 0           |
| cis-Nerolidol           | 0.000         | 0           |
| trans-Nerolidol         | 0.000         | 0           |
| Ocimene                 | 0.000         | 0           |
| beta-Ocimene            | 0.000         | 0           |
| alpha-Pinene            | 0.000         | 0           |
| (-)-beta-Pinene         | 0.000         | 0           |
| alpha-Terpinene         | 0.000         | 0           |
| gamma-Terpinene         | 0.000         | 0           |
| Terpinolene             | 0.000         | 0           |
|                         | <b>0.791%</b> | <b>7.91</b> |

**PREDOMINANT TERPENES**

|                     |        |
|---------------------|--------|
| alpha-Pinene        | 0.000% |
| (-)-beta-Pinene     | 0.000% |
| beta-Myrcene        | 0.000% |
| delta-3-Carene      | 0.000% |
| alpha-Terpinene     | 0.000% |
| d-Limonene          | 0.000% |
| Linalool            | 0.000% |
| beta-Caryophyllene  | 0.436% |
| alpha-Humulene      | 0.231% |
| (-)-alpha-Bisabolol | 0.039% |

**NOTES:**
**FINAL APPROVAL**

|  |   |
|--|---|
| <br>Daniel Weidensaul<br>13-Aug-2019<br>10:06 AM | <br>David Green<br>13-Aug-2019<br>10:25 AM |
|--|---|

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**Essential CBD Formula**


|                  |             |                 |              |
|------------------|-------------|-----------------|--------------|
| <b>Batch ID:</b> | 0720750     | <b>Test ID:</b> | 9633573.0015 |
| <b>Reported:</b> | 15-Aug-2019 | <b>Method:</b>  | TM17         |
| <b>Type:</b>     | Concentrate |                 |              |
| <b>Test:</b>     | Pesticides  |                 |              |


**PESTICIDE RESIDUE**

| Compound            | Dynamic Range (ppb) | Result (ppb) | Compound        | Dynamic Range (ppb) | Result (ppb) |
|---------------------|---------------------|--------------|-----------------|---------------------|--------------|
| Acephate            | 51 - 2383           | ND*          | Malathion       | 51 - 2383           | ND*          |
| Acetamiprid         | 51 - 2383           | ND*          | Metalaxyl       | 309 - 2383          | ND*          |
| Avermectin          | 309 - 2383          | ND*          | Methiocarb      | 51 - 2383           | ND*          |
| Azoxystrobin        | 51 - 2383           | ND*          | Methomyl        | 51 - 2383           | ND*          |
| Bifenazate          | 51 - 2383           | ND*          | MGK 264 1       | 51 - 2383           | ND*          |
| Boscalid            | 309 - 2383          | ND*          | MGK 264 2       | 309 - 2383          | ND*          |
| Carbaryl            | 51 - 2383           | ND*          | Myclobutanil    | 309 - 2383          | ND*          |
| Carbofuran          | 51 - 2383           | ND*          | Naled           | 309 - 2383          | ND*          |
| Chlorantraniliprole | 51 - 2383           | ND*          | Oxamyl          | 51 - 2383           | ND*          |
| Chlorpyrifos        | 309 - 2383          | ND*          | Paclobutrazol   | 51 - 2383           | ND*          |
| Clofentezine        | 51 - 2383           | ND*          | Permethrin      | 309 - 2383          | ND*          |
| Diazinon            | 51 - 2383           | ND*          | Phosmet         | 51 - 2383           | ND*          |
| Dichlorvos          | 309 - 2383          | ND*          | Prophos         | 309 - 2383          | ND*          |
| Dimethoate          | 51 - 2383           | ND*          | Propoxur        | 309 - 2383          | ND*          |
| E-Fenpyroximate     | 309 - 2383          | ND*          | Pyridaben       | 309 - 2383          | ND*          |
| Etofenprox          | 309 - 2383          | ND*          | Spinosad A      | 51 - 2383           | ND*          |
| Etoxazole           | 309 - 2383          | ND*          | Spinosad D      | 309 - 2383          | ND*          |
| Fenoxycarb          | 51 - 2383           | ND*          | Spiromesifen    | 51 - 2383           | ND*          |
| Fipronil            | 309 - 2383          | ND*          | Spirotetramat   | 309 - 2383          | ND*          |
| Flonicamid          | 51 - 2383           | ND*          | Spiroxamine 1   | 51 - 2383           | ND*          |
| Fludioxonil         | 309 - 2383          | ND*          | Spiroxamine 2   | 51 - 2383           | ND*          |
| Hexythiazox         | 309 - 2383          | ND*          | Tebuconazole    | 51 - 2383           | ND*          |
| Imazalil            | 309 - 2383          | ND*          | Thiacloprid     | 51 - 2383           | ND*          |
| Imidacloprid        | 51 - 2383           | ND*          | Thiamethoxam    | 51 - 2383           | ND*          |
| Kresoxim-methyl     | 51 - 2383           | ND*          | Trifloxystrobin | 309 - 2383          | ND*          |

\* ND = None Detected (Defined by Dynamic Range of the method)

**FINAL APPROVAL**

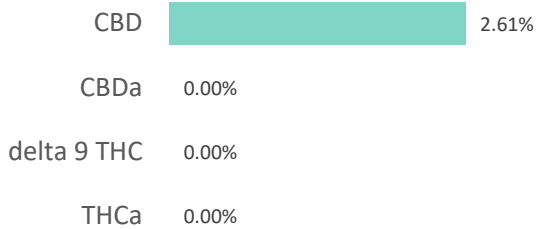
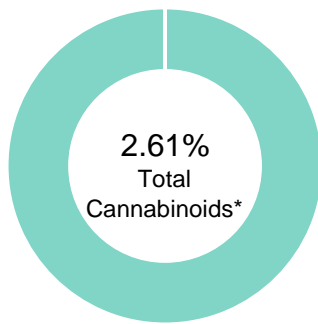
  
**Sam Smith**  
 15-Aug-2019  
 9:19 AM  
 PREPARED BY / DATE

  
**Greg Zimpfer**  
 15-Aug-2019  
 10:17 AM  
 APPROVED BY / DATE

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**Essential CBD Formula**

|                  |             |                 |              |
|------------------|-------------|-----------------|--------------|
| <b>Batch ID:</b> | 720750      | <b>Test ID:</b> | 2288252.0056 |
| <b>Reported:</b> | 15-Aug-2019 | <b>Method:</b>  | TM14         |
| <b>Type:</b>     | Concentrate |                 |              |
| <b>Test:</b>     | Potency     |                 |              |

**CANNABINOID PROFILE**


| Compound                                     | LOQ (%) | Result (%)  | Result (mg/g) |
|--|---------|-------------|---------------|
| Delta 9-Tetrahydrocannabinolic acid (THCA-A) | 0.18    | 0.00        | 0.0           |
| Delta 9-Tetrahydrocannabinol (Delta 9THC)    | 0.09    | 0.00        | 0.0           |
| Cannabidiolic acid (CBDA)                    | 0.19    | 0.00        | 0.0           |
| Cannabidiol (CBD)                            | 0.11    | 2.61        | 26.1          |
| Delta 8-Tetrahydrocannabinol (Delta 8THC)    | 0.10    | 0.00        | 0.0           |
| Cannabinolic Acid (CBNA)                     | 0.25    | 0.00        | 0.0           |
| Cannabinol (CBN)                             | 0.11    | 0.00        | 0.0           |
| Cannabigerolic acid (CBGA)                   | 0.16    | 0.00        | 0.0           |
| Cannabigerol (CBG)                           | 0.09    | 0.00        | 0.0           |
| Tetrahydrocannabivarinic Acid (THCVA)        | 0.16    | 0.00        | 0.0           |
| Tetrahydrocannabivarin (THCV)                | 0.08    | 0.00        | 0.0           |
| Cannabidivarinic Acid (CBDVA)                | 0.18    | 0.00        | 0.0           |
| Cannabidivarin (CBDV)                        | 0.10    | 0.00        | 0.0           |
| Cannabichromenic Acid (CBCA)                 | 0.14    | 0.00        | 0.0           |
| Cannabichromene (CBC)                        | 0.16    | 0.00        | 0.0           |
| <b>Total Cannabinoids</b>                    |         | <b>2.61</b> | <b>26.10</b>  |
| Total Potential THC**                        |         | 0.00        | 0.00          |
| Total Potential CBD**                        |         | 2.61        | 26.10         |


**NOTES:**

N/A

% = % (w/w) = Percent (Weight of Analyte / Weight of Product)


\* Total Cannabinoids result reflects the absolute sum of all cannabinoids detected.

\*\* Total Potential THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step.

$$\text{Total THC} = \text{THC} + (\text{THCa} * (0.877)) \text{ and } \text{Total CBD} = \text{CBD} + (\text{CBDa} * (0.877))$$
**FINAL APPROVAL**


**Alex Smith**  
 15-Aug-2019  
 3:55 PM

PREPARED BY / DATE



**Greg Zimpfer**  
 15-Aug-2019  
 3:57 PM

APPROVED BY / DATE

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