



# CERTIFICATE OF ANALYSIS

PREPARED FOR:



**RELIV INTERNATIONAL, INC.**

136 CHESTERFIELD INDUSTRIAL BLVD.  
CHESTERFIELD, MO 63005

THIS REPORT IS FOR A FULL BATCH TESTING  
LABORATORY BATCH ID: **RLV-FS500.011**

Including Batch & Fill Lot ID:

**19LL206A11**



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# RLV 500 mg FULL SPECTRUM EXTRACT

Batch ID: RLV-FS500.19LL206A11  
 Received: 24-Oct-2019  
 Matrix: Concentrates/Extracts

Certificate ID: 110119SR008  
 Test Type: Potency  
 Method: Tested in accordance of the requirements of ISO/IEC 17025:2005/2017



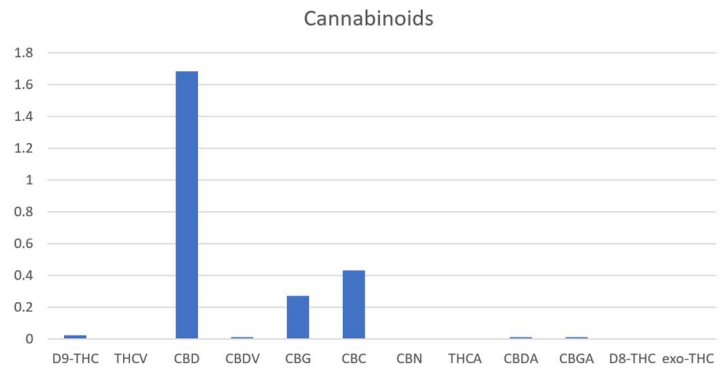
The data presented in this report has been reviewed in an accredited laboratory. I attest that the information herein has been checked for accuracy and against quality control requirements for each test method used. These results pertain only to the test materials listed in this report. This report may not be reproduced except in its complete entirety.

Dan Krist  
*Dan Krist*  
 Lab Manager  
 SS BioMed, Inc.

## T1: CANNABINOID PROFILE & POTENCY

The tested sample was analyzed (by Liquid Chromatography, LC) for plant-based cannabinoids. All collected data was compared to laboratory certified reference standards at known concentrations.

| ID      | Weight % | Conc. mg/mL |
|---------|----------|-------------|
| D9-THC  | .024     | 0.24        |
| THCV    | ND       | ND          |
| CBD     | 1.6879   | 16.89       |
| CBDV    | trace    | trace       |
| CBG     | .028     | 0.28        |
| CBC     | .041     | 0.41        |
| CBN     | ND       | ND          |
| THCA    | ND       | ND          |
| CBDA    | trace    | trace       |
| CBGA    | trace    | trace       |
| D8-THC  | ND       | ND          |
| exo-THC | ND       | ND          |



**TOTAL:** 1.7809 17.81 mg/mL  
**Max THC:** 0.0240 0.240 mg/mL  
**Max CBD:** 1.6879 16.89 mg/mL

Max THC and Max CBD are calculated values for total cannabinoids assuming complete decarboxylation of the acid to the neutral form. Calculation is based on the weight loss of the acid group during decarboxylation. **THC Minimum Detectable Limit** = 0.001 ng/mL  
**ND** = None detected above the limits of detection (LLD)  
**trace** = <0.015 mg/mL



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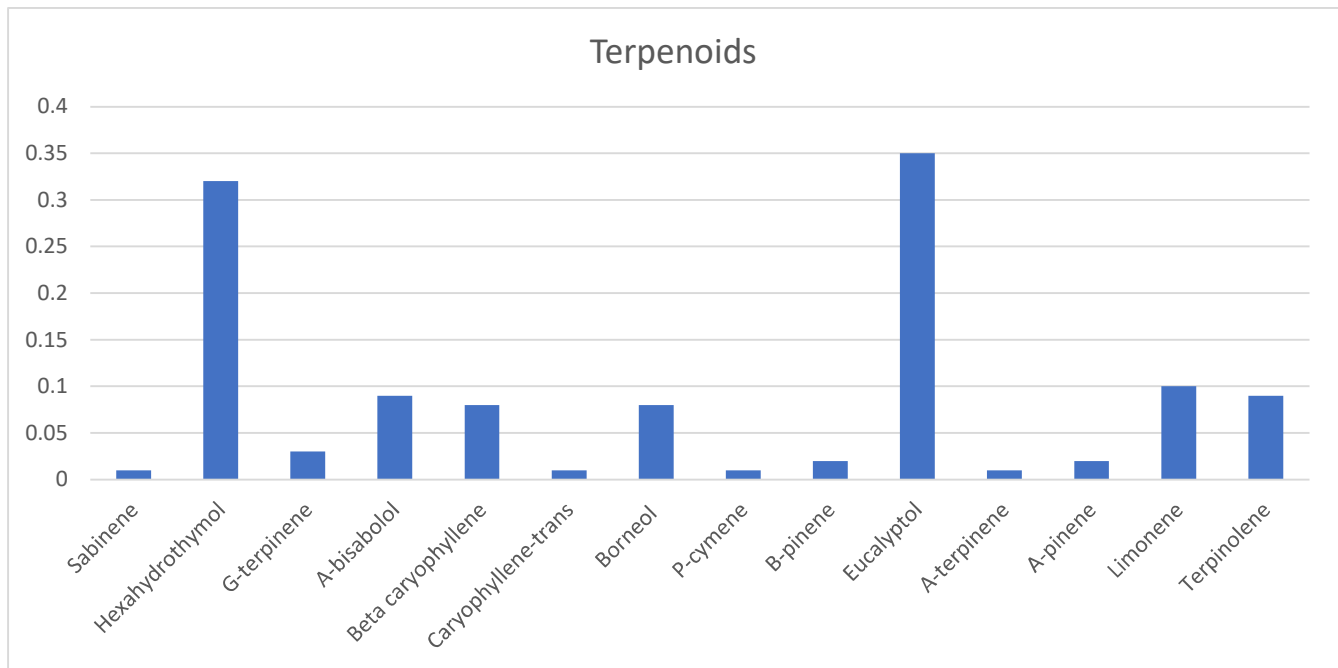
## T2: TERPENE PROFILE

The tested sample was analyzed (by Head Space Gas Chromatography, HS-GC) for plant-based terpenoids. All collected data was compared to laboratory certified reference standards at known concentrations.

| ID                  | Weight % | Conc. mg/mL |
|---------------------|----------|-------------|
| a-Phellandrene      | 0.000    | 0.00        |
| Fenchone            | 0.000    | 0.00        |
| Sabinene            | 0.001    | 0.01        |
| h-Hydrothymol       | 0.032    | 0.32        |
| Myrcene             | 0.000    | 0.00        |
| Isopulegol          | 0.000    | 0.00        |
| Nerolidol-cis       | 0.000    | 0.00        |
| g-Terpinene         | 0.003    | 0.03        |
| Nerolidol-trans     | 0.000    | 0.00        |
| a-Bisabolol         | 0.009    | 0.09        |
| Linalool            | 0.000    | 0.00        |
| beta Caryophyllene  | 0.008    | 0.08        |
| Caryophyllene-trans | 0.001    | 0.01        |
| Borneol             | 0.007    | 0.07        |

| ID          | Weight % | Conc. mg/mL |
|-------------|----------|-------------|
| Guaiol      | 0.000    | 0.00        |
| Humulene    | 0.000    | 0.00        |
| p-Cymene    | 0.001    | 0.01        |
| Camphene    | 0.000    | 0.00        |
| b-Pinene    | 0.002    | 0.02        |
| Eucalyptol  | 0.035    | 0.35        |
| a-Terpinene | 0.001    | 0.01        |
| 3-Carene    | 0.000    | 0.00        |
| a-Pinene    | 0.002    | 0.02        |
| Limonene    | 0.010    | 0.10        |
| Geraniol    | 0.000    | 0.00        |
| Ocimene-1   | 0.000    | 0.00        |
| Ocimene-2   | 0.000    | 0.00        |
| Terpinolene | 0.008    | 0.08        |

TOTAL WT %: 0.120%



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|  | Limits           | Result           | Status |
|--|------------------|------------------|--------|
| <b>T3: Microbiological Contaminants<sup>1</sup></b>  |                  |                  |        |
| Total Aerobic Bacterial Count  | 10,000 CFU/g     | Conforms         | PASS   |
| Total Coliform Bacterial Count   | 100 CFU/g        | Conforms         | PASS   |
| Total Yeast & Mold   | 1,000 CFU/g      | Conforms         | PASS   |
| <b>T4: Pathogenic Bacterial Contaminants<sup>1</sup></b>                                       |                  |                  |        |
| E. Coli (O157)   | NA               | Negative         | PASS   |
| Salmonella   | NA               | Negative         | PASS   |
| <b>T5: Heavy Metal Analysis</b><br>using Inductively Coupled Plasma Mass Spectrometry (ICP-MS) |                  |                  |        |
| Arsenic  | <2 ppm           | Conforms         | PASS   |
| Cadmium  | <2 ppm           | Conforms         | PASS   |
| Lead   | <1 ppm           | Conforms         | PASS   |
| Mercury  | <1 ppm           | Conforms         | PASS   |
| <b>T6: Pesticide Analysis</b><br>using Liquid Chromatography with Mass Spectrometry (LC/MS)    |                  |                  |        |
| Abamectin  | 300 ppb          | None Detected    | PASS   |
| Abamectin B1b  | 300 ppb          | None Detected    | PASS   |
| Azoxystrobin   | 40,000 ppb       | None Detected    | PASS   |
| Bifenazate   | 5,000 ppb        | None Detected    | PASS   |
| Bifenthrin   | 500 ppb          | None Detected    | PASS   |
| Cyfluthrin   | 1,000 ppb        | None Detected    | PASS   |
| Daminozide   | 10 ppb           | None Detected    | PASS   |
| Etoxazole  | 1,500 ppb        | None Detected    | PASS   |
| Fenoxycarb   | 10 ppb           | None Detected    | PASS   |
| Imazalil   | 10 ppb           | None Detected    | PASS   |
| Imidacloprid   | 3,000 ppb        | None Detected    | PASS   |
| Myclobutanil   | 9,000 ppb        | None Detected    | PASS   |
| Paclobutrazol  | 10 ppb           | None Detected    | PASS   |
| Piperonyl butoxide   | 8,000 ppb        | None Detected    | PASS   |
| Pyrethrin  | 1,000 ppb        | None Detected    | PASS   |
| Spinosad   | 3,000 ppb        | None Detected    | PASS   |
| Spiromesifen   | 12,000 ppb       | None Detected    | PASS   |
| Spirotetramat  | 13,000 ppb       | None Detected    | PASS   |
| Trifloxystrobin  | 30,000 ppb       | None Detected    | PASS   |
| <b>T7: Active Diols</b><br>using Liquid Chromatography (LC)                                    |                  |                  |        |
|  | Potency          | Results per 30mL | Status |
| CBD  | 16.89 mg/serving | 506.7 mg         | PASS   |
| D-9 THC  | 0.24 mg/serving  | 7.2 mg           | PASS   |
| CBC  | 0.41 mg/serving  | 12.3 mg          | PASS   |
| CBG  | 0.28 mg/serving  | 8.4 mg           | PASS   |

<sup>1</sup> Contaminant detection testing in accordance with AOAC – OMA #2014.05, USP 2021, and USP 2022

**-END OF REPORT-**



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