

## Chemical Content Analysis

Date: 06-08-2019

Client: Vitality

Product: Vitality CBD Full Spectrum Natural 300mg

Volume: 30 mL

Batch No: 7700A-FSCBD215300

Lab ID: CBD0280

DOP: 26/06/2019

### Visual Inspection:

Pale yellow liquid, translucent.

### Method Summary:

0.1ml of sample was measured in a pipette and extracted in Methanol to provide a sample at 0.01mg/ml. CBD content was analysed on an Agilent HPLC fitted with a DAD detector. Content on HPLC was analysed against a standard calibration of CBD, CBN and THC, supplied by Restek, as well as CBDA and THCA supplied by Sigma-Aldrich. The results are presented in Table 1 and Figure 1 below.

Compound	CAS Number	Concentration (mg/ml)	LoQ (µg/ml)
Cannabidiol	13956-291	9.99	0.1
Cannabinol	521-35-7	BQL	0.1
Delta-9- Tetrahydrocannabinol	1972-08-3	BQL	0.1
Cannabidiolic Acid	1244-58-2	BQL	0.1
Delta-9-Tetrahydrocannabinolic Acid	23978-85-0	BQL	0.2

BQL, Below Quantitation Limit.

### % Content of Sample

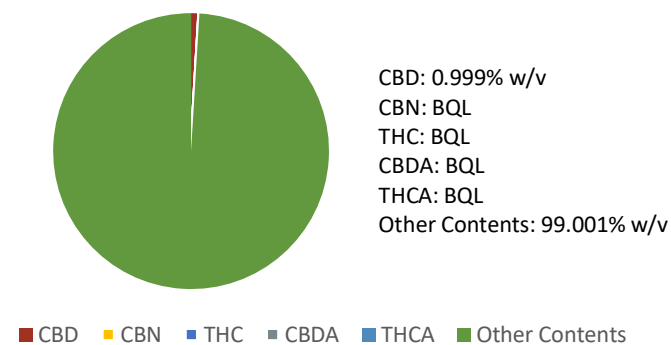


Figure 1. Pie chart of the analysis result.

### Comments:

300mg of CBD in 30ml is equivalent to 10mg/ml

Acceptance Criteria:  $\pm 5\%$  of target concentration CBD total, including CBDA, below legal limit of CBN, THC and THCA.  
 CBD- Cannabidiol  
 CBDA- Cannabidiolic Acid  
 CBN- Cannabinol. The legal limit for this compound is 1mg per container.  
 THC- delta-9-Tetrahydrocannabinol.  
 THCA- delta-9-Tetrahydrocannabinolic Acid. The legal limit for both THC and THCA in this mixture is 1mg per container  
 The sample passes all acceptance criteria for CBD, CBN and THC.

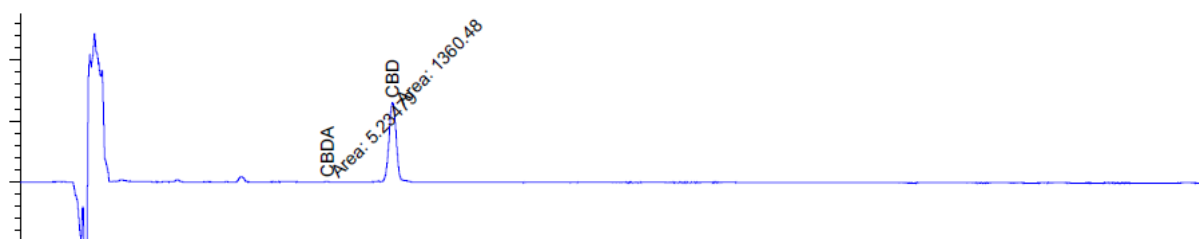


Figure 2. Chromatogram of the analysis

Analysis By:  
Lawrence Theobald

### Approved By:

Mark Portsmouth, Analytical Chemistry Consultant

DATE: 06-08-19