

## Chemical Content Analysis

Date: 02-05-2019

Client: Vitality

Product: Vitality CBD Full Spectrum Lemon 1200mg

Batch No: 7253A-FSCBD271200

Lab ID: CBD0190

DOP: 12/04/2019

### 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 0.04mg/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	39.53	0.1
Cannabinol	521-35-7	BQL	0.1
Delta-9- Tetrahydrocannabinol	1972-08-3	BQL	0.1
Cannabidiolic Acid	1244-58-2	0.35	0.1
Delta-9-Tetrahydrocannabinolic Acid	23978-85-0	BQL	0.2

BQL, Below Quantitation Limit.

### % Content of Sample

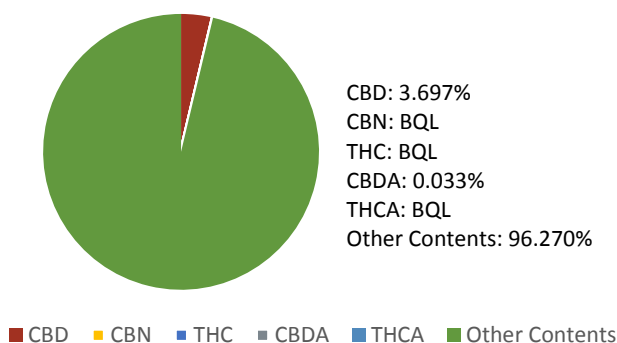


Figure 1. Pie chart of the analysis result.

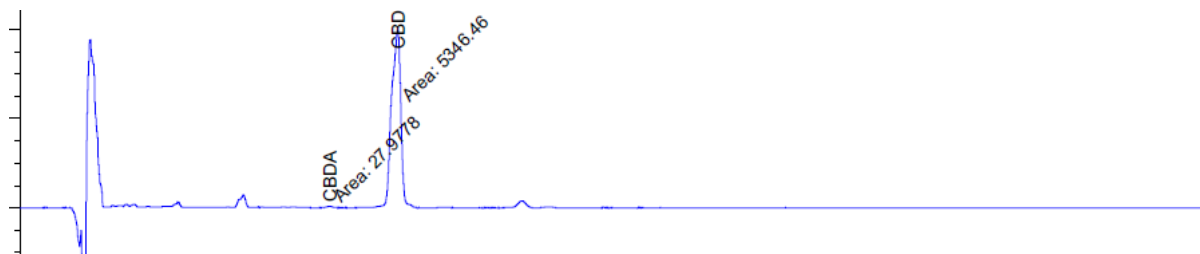


Figure 2. Chromatogram of the analysis

### Comments:

1200mg of CBD in 30ml is equivalent to 40mg/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 this compound is 1mg per container  
 The sample passes all acceptance criteria for CBD, CBN and THC.

Analysis By:  
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Approved By:  
Mark Portsmouth, Analytical Chemistry Consultant

DATE: 08-05-19