

Chemical Content Analysis

Date: 14-06-2019

Client: Vitality

Product: Vitality CBD Full Spectrum Oral Spray
Berry 300mg

Volume: 30 mL

Batch No: TH020519MB

Lab ID: CBD0228

Visual Inspection:

Clear liquid

Method Summary:

1ml of sample was measured in a pipette and extracted in Isopropyl Alcohol to provide a sample at 0.4mg/ml. This was then diluted further in Methanol. 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	9.54	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

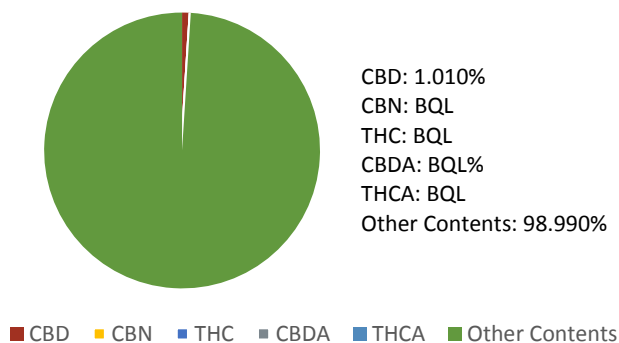


Figure 1. Pie chart of the analysis result.

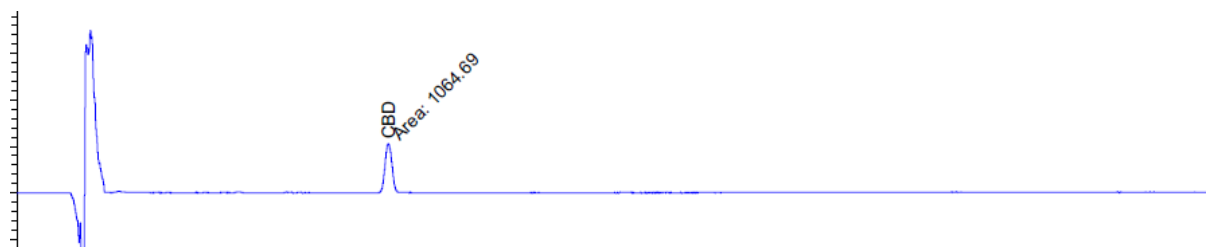


Figure 2. Chromatogram of the analysis

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 this compound is 1mg per container

The sample passes all acceptance criteria for CBD, CBN and THC.

Analysis By:
Lawrence Theobald

Approved By:

Mark Portsmouth, Analytical Chemistry Consultant

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