

CERTIFICATE OF ANALYSIS

Project: CBD
Order ID: 2019000570

Customer ID: 54755766
Customer Name: CBD Plus USA

Harvest/Extract Lot: GP2110/001
Harvest/Extract Date: 02/28/2019

Cultivar (Strain): Tropical (FS)
Sample Date: 03/04/2019

Lab ID: 2019002084
Date Received: 03/04/2019

Sample Matrix: Oil/Tincture
Date Completed: 03/05/2019

Remarks:

Analysis Date/Time: 03-05-2019 1618
Analyst: KWF

Method: HPLC/UV
Instrument: Agilent 1100

Moisture Content (%): -
Water Activity (aw): - at - °C

<u>Cannabinoid</u>	<u>Result</u> <u>(%)</u>	<u>Result</u> <u>(mg/mL)</u>	<u>Reporting Limit</u> <u>(mg/mL)</u>	<u>Per Unit</u> <u>(mg)</u>
CBD	3.51	35.1	0.05	1054
CBDa	<RL	<RL	0.05	-
CBDv	0.0130	0.130	0.05	3.90
Δ9-THC	0.0805	0.805	0.05	24.1
Δ8-THC	<RL	<RL	0.05	-
THCa	0.0105	0.105	0.05	3.14
CBC	0.0747	0.747	0.05	22.4
CBG	0.0255	0.255	0.05	7.65
CBGa	<RL	<RL	0.05	-
CBN	0.0054	0.054	0.05	1.63
TOTAL	7.45	37.2		1116

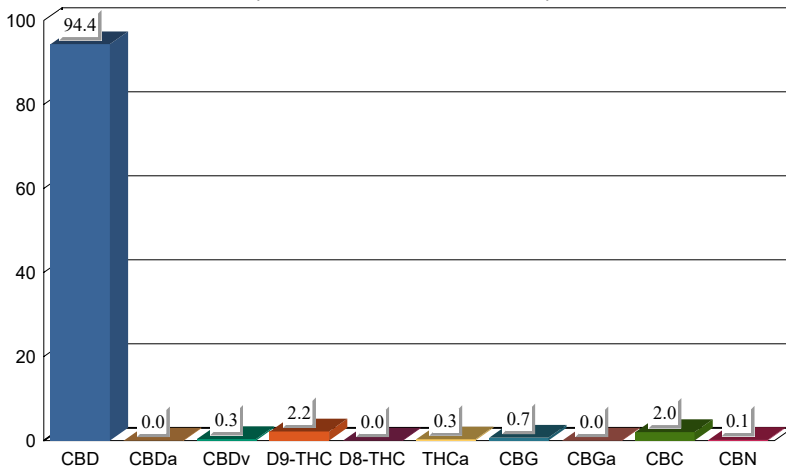


UNIT VOLUME (mL): 30.0

TOTAL THC 0.0897 0.897 26.9
TOTAL CBD 3.51 35.1 1054

Deviations from standard operating procedure: None

Cannabinoid Distribution
(% of Total Cannabinoids)



Recoveries for all analyte standards: 90-110%
Replicate Uncertainties: <5% RSD, <20% RPD
Sample/Reagent Blanks: <RL for all analytes

Values for plant matter are adjusted for moisture content.

Total THC = (THCa x 0.877) + Δ9-THC
Total CBD = (CBDa x 0.877) + CBD

Percentage results are reported by mass.
mg/g results are reported as mass component per mass material.

Abbreviations: UV - Ultraviolet, HPLC - High Pressure Liquid Chromatography, RL - Reporting Limit, RPD - Relative Percent Difference, RSD - Relative Standard Deviation

REPORT OF LABORATORY ANALYSIS

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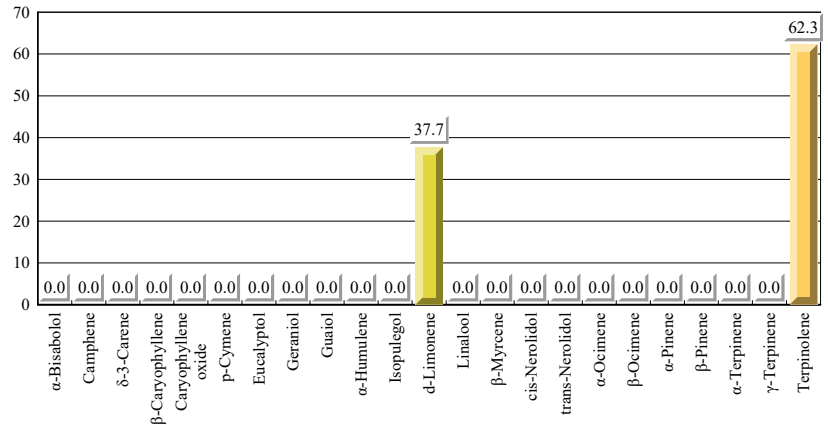
TERPENOID PROFILE

Analysis Date/Time: 03-05-2019 0814 **Method:** HS/GC/MS (Internal Method-002) **Deviations from SOP:**
Analyst: KWF **Instrument:** Agilent 7890/5975 None

<u>Terpene</u>	<u>Result</u> <u>(µg/g)</u>	<u>Result</u> <u>(%, total terpenes)</u>
α-Bisabolol	-	-
Camphene	-	-
δ-3-Carene	-	-
β-Caryophyllene	-	-
Caryophyllene oxide	-	-
p-Cymene	-	-
Eucalyptol	-	-
Geraniol	-	-
Guaiol	-	-
α-Humulene	-	-
Isopulegol	-	-
d-Limonene	47.6	37.7
Linalool	-	-
β-Myrcene	-	-
cis-Nerolidol	-	-
trans-Nerolidol	-	-
α-Ocimene	-	-
β-Ocimene	-	-
α-Pinene	-	-
β-Pinene	-	-
α-Terpinene	-	-
γ-Terpinene	-	-
Terpinolene	78.6	62.3
TOTAL	126	100



Terpenoid Distribution
(% of Total Terpenes)



Reporting Limit (µg/g) 12

Abbreviations: HS - Headspace, GC - Gas Chromatography, MS - Mass Spectrometry, RL - Reporting Limit

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