

Certificate of Analysis

Company: Mad River Botanicals
 410 Butternut Hill Rd
 Waitsfield, VT 05673

Sample ID: Whole Plant Hemp Extract CBG

Lot: 4

Report Date: 5/3/2023

Matrix: Concentrate

Date Analyzed: 5/2/2023

Customer ID: 210119-0

Date Sampled: N/A

Analyst: 011

Grower License #: #50_2022_00000111

Date Received: 4/28/2023

Report ID: C230428AT

Cannabinoid Summary

Cannabinoid Profile	LOQ (mg/g)	Concentration (mg/g)	Weight (%)
CBDVA	0.0005	<LOQ	<LOQ
CBDV	0.0012	<LOQ	<LOQ
CBDA	0.0008	<LOQ	<LOQ
CBGA	0.0008	86.58	8.66
CBG	0.0019	675.66	67.57
CBD	0.0019	34.03	3.40
THCV	0.0021	<LOQ	<LOQ
CBN	0.0013	<LOQ	<LOQ
Δ9-THC	0.0020	5.00	0.50
Δ8-THC	0.0019	<LOQ	<LOQ
THC-A	0.0034	<LOQ	<LOQ
CBC	0.0024	28.25	2.83
Total THC		5.00	0.50
Total CBD		34.03	3.40
Total Cannabinoids		829.52	82.95

0.5%
Total THC

3.4%
Total CBD

82.95%
Total Cannabinoids

0.5%
Δ9-THC

N/A
Percent Moisture

1 : 6.8
THC : CBD Ratio

Cannabinoids Methodology: High Performance Liquid Chromatography (HPLC) using PerkinElmer FLEXAR™ with Photo Diode Array Detector (PDA)

Total CBD and total THC are calculated values, to account for assumed decarboxylation from the acid form (THCA or CBDA) to the neutral form, causing weight loss of the acid group. These values are calculated as follows:
 Total THC = (THCA x 0.877) + Δ9-THC Total CBD = (CBDA x 0.877) + CBD
 Ratio of Total CBD: Total THC Reagent Blanks: < LOQs for all analytes

LOQ = The lowest quantity that this method can reliably detect. Any cannabinoid that was not detected is assumed to be less than the stated LOQ (<LOQ).

All results reflect dry weight of material, based on % moisture of the sample.

Measurement of Uncertainty (MU): the parameter, associated with the result of a measurement, that characterizes the dispersion of the values that could reasonably be attributed to the particular quantity subject to measurement.
 Δ9-THC MU = ±0.005% Total THC MU = ±0.007%

All other cannabinoid MU values are available upon request.

All moisture analysis is determined by loss-on-drying measurement using OHAUS Model MB90 Moisture Content Readers.



This report shall not be reproduced except in full without approval of the laboratory. This is to provide assurance that parts of a report are not taken out of context. Results apply to the samples as received.

Certified by: *Luke E.M*
 Luke Emerson Mason (Laboratory Director, Bia Diagnostics)