



**Certificate of Analysis**

**Company:** Grass Roots Vermont

84 Lovers LN

Brandon, VT 05733

**Customer ID:** 230207-0

**Grower License #:** RD3083365

**Sample ID:** Mac

**Lot:** FAM-GRVT204560

**Matrix:** Flower

**Date Sampled:** N/A

**Date Received:** 5/17/2023

**Report Date:** 5/24/2023

**Date Analyzed:** 5/23/2023

**Analyst:** 011

**Report ID:** C2305178A

**Cannabinoid Summary**

Cannabinoid Profile	LOQ (mg/g)	Concentration (mg/g)	Weight (%)
CBDVA	0.0005	<LOQ	<LOQ
CBDV	0.0012	<LOQ	<LOQ
CBDA	0.0008	1.28	0.13
CBGA	0.0008	9.42	0.94
CBG	0.0019	0.46	0.05
CBD	0.0019	<LOQ	<LOQ
THCV	0.0021	<LOQ	<LOQ
CBN	0.0013	<LOQ	<LOQ
Δ9-THC	0.0020	4.85	0.48
Δ8-THC	0.0019	<LOQ	<LOQ
THC-A	0.0034	280.58	28.06
CBC	0.0024	1.42	0.14
<b>Total THC</b>		250.91	25.09
<b>Total CBD</b>		1.12	0.11
<b>Total Cannabinoids</b>		298.01	29.80

25.09%  
Total THC

0.11%  
Total CBD

29.8%  
Total Cannabinoids

0.48%  
Δ9-THC

10.73%  
Percent Moisture

1:0  
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)

**Certificate of Analysis**

**Company:** Grass Roots Vermont  
84 Lovers LN  
Brandon, VT 05733

**Sample ID:** Mac  
**Lot:** FAM-GRVT204560  
**Matrix:** Flower

**Report Date:** 5/30/2023  
**Date Analyzed:** 5/26/2023  
**Analyst:** 011  
**Report ID:** C230517BA

**Customer ID:** 230207-0  
**Grower License #:** RD3083365

**Date Sampled:** N/A  
**Date Received:** 5/17/2023

**Pathogen Summary**

Target Pathogens	Method	LOD (cfu/g)	Result (cfu/g)
Aspergillus - flavus, fumigatus, niger, terreus	Aspergillus AOAC PTM No. 032104	5	<LOD
STEC	STEC Virx AOAC PTM No. 121203	5	<LOD
Salmonella spp.	Salmonella II AOAC PTM No. 010803	5	<LOD



Test Methodology: Bio-Rad IQ-Check PCR Kits

cfu/g = colony forming units per gram

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

Reagent Blanks: <LOD for all analytes

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**Certificate of Analysis**

<b>Company:</b> Grass Roots Vermont 84 Lovers LN Brandon, VT 05733	<b>Sample ID:</b> Mac  <b>Lot:</b> FAM-GRVT204560  <b>Matrix:</b> Flower	<b>Report Date:</b> 5/30/2023 <b>Date Analyzed:</b> 5/25/2023 <b>Analyst:</b> 045 <b>Report ID:</b> C2305178A
<b>Customer ID:</b> 230207-0	<b>Date Sampled:</b> N/A	
<b>Grower License #:</b> RD3083365	<b>Date Received:</b> 5/17/2023	

**Pesticides/Mycotoxins Summary**

Category II Residual Pesticide	LOQ (ppm)	Concentration (ppm)
Abamectin	0.0100	<LOQ
Acephate	0.0010	<LOQ
Acequinocyl	0.0010	<LOQ
Azoxystrobin	0.0010	<LOQ
Bifenazate	0.0010	<LOQ
Bifenthrin	0.0010	<LOQ
Carbaryl	0.0010	<LOQ
Cypermethrin	0.0100	<LOQ
Etoxazole	0.0010	<LOQ
Imidacloprid	0.0010	<LOQ
Myclobutanil	0.0010	<LOQ
Pyrethrin I	0.0010	<LOQ
Pyrethrin II	0.0010	<LOQ
Spinosyn A	0.0010	<LOQ
Spinosyn D	0.0010	<LOQ

Category II Mycotoxin	LOQ (ppm)	Concentration (ppm)
Ochratoxin A	0.0020	NOT TESTED
Aflatoxin B1	0.0002	NOT TESTED
Alfatoxin B2	0.0010	NOT TESTED
Alfatoxin G1	0.0002	NOT TESTED
Alfatoxin G2	0.0010	NOT TESTED

Category I Residual Pesticide	LOQ (ppm)	Concentration (ppm)
Chlorpyrifos	0.0010	<LOQ
Imazalil	0.0010	<LOQ

<b>10.73%</b>
<b>Percent Moisture</b>



LOQ = The lowest quantity this method can reliably detect. Any pesticide or mycotoxins 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.

ppb = parts per billion

Pesticides/Mycotoxin Methodology: Liquid Chromatography with Tandem Mass Spectrometry using PerkinElme Q Sight® LX50 UHPLC and Q Sight 220 Mass Spectrometer

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

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