

Analytical Report

[A] 40 Speen St., Suite 301 Framingham, MA 01701

Lab: 508-465-3470 email: lab@ma.steephill.com

HMA Report ID: CU

CURC-38837

Report Submitted: 2/20/2022

[B] Client Info

Curaleaf Massachusetts, Inc. 30 Worcester Rd. Webster, MA 01570

License: RMD385-C
Metrc Manifest: 934903
Date Received: 2/15/2022

[C] Sample Identification

 METRC Batch ID:
 211230LL.F28-1-D

 METRC Sample ID:
 1A40A0100000E11000038837

 METRC Source ID:
 1A40A0100000E11000040839

ME Batch ID: NA

[D] Sample Properties

Sample Weight (g): 7.0

Serving Size (g): NA

[E] Product Characterization

Production Stage: Finished Plant Material

"-" = Not Tested

Product Class: Flower
Ingestion Only: --Extraction Solvent: ---

Retail Name: CL,Flower,(H)Lemon Lava,,,,Bulk

[F] Results for Requested Analyses

Cannabinoid Profile

Terpene Profile Heavy Metals Residual Solvents

Y = Tested

Pesticides P

P = Pass

Total Yeast and Mold

Mycotoxins P

Pathogenic Pacteria P

Total Coliforms Total Aerobic Bacteria Enterobacteriaceae Vitamin E
Acetate

[G] Authorization

Steep Hill Massachusetts is an Independent Testing Laboratory accredited to ISO/IEC 17025:2017 and licensed by the Massachusetts Cannabis Control Commission (CCC, # IL281277). Analytical methods and best-practices used are in compliance with the CCC's Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for MA Registered Medical Marijuana Dispensaries.

The net/gross weight of the sample received was verified and all analyses were conducted at the SHMA laboratory. Results presented here pertain to the sample received and relate only to items tested. This Analytical Report shall not be reproduced except in full without SHMA approval.







Janes J Kun

James J. Kocis Laboratory Director



Item Name: CL,Flower,(H)Lemon Lava,,,Bulk

[H] Cannabinoid Profile Metrc ID Tag: 1A40A0100000E11000038837 Analysis Date: 02/18/22 Datafile: CURC-38837_1A40A0100000E11000038837_POTENCY_A_20220217_LK_02_2172022_052.lcd Analyst(s): AS

Cannabinoids were analyzed using a High Performance Liquid Chromatograph equipped with a Photodiode Array Detector (HPLC-PDA) following SHMA SOP-002-GA; SOP-025-GA; SOP-073-GA.

<u>Cannabinoid</u>	LOQ (%)	Result (%)	Result (mg/g)	Result (mg/serv)
Tetrahydrocannabinolic acid (THCA)	0.0967	17.4974	174.974	N/A
∆9-Tetrahydrocannabinol (∆9-THC)	0.1206	1.1831	11.831	N/A
Cannabidiolic acid (CBDA)	0.1263	ND	ND	N/A
Cannabidiol (CBD)	0.1198	ND	ND	N/A
Cannabinol (CBN)	0.1101	ND	ND	N/A
Cannabichromene (CBC)	0.1096	ND	ND	N/A
Cannabigerolic acid (CBGA)	0.1135	0.4888	4.888	N/A
Cannabigerol (CBG)	0.1089	0.1509	1.509	N/A
Cannabidivarin (CBDV)	0.1097	ND	ND	N/A
Tetrahydrocannabivarin (THCV)	0.1098	ND	ND	N/A
Δ8-Tetrahydrocannabinol (Δ8-THC)	0.1096	ND	ND	N/A
Total Available Cannabinoids	-	19.3202	193.202	-
Note "NT": Not Tested; "ND": Not Detected; "BLQ": Below limit of Quantification. Percentage dry-weight-basis.				

[I] Heavy Metals Analysis Metrc ID Tag: 1A40A0100000E11000038837 Analysis Date: 02/17/22 Datafile: hm_b_20220216_sd_th\DIG-20220215_SD CURC-38837.121 Analyst(s): TH

Heavy Metals were measured using an Inductively Coupled Plasma Mass Spectrometer (ICP-MS) following SHMA SOP-021-GA; SOP-061-GA; SOP-072-GA.

ı		<u>LOQ</u>	<u>Result</u>	<u>All Us</u>	<u>es</u>	<u>Ingestion</u>	<u>Only</u>
	<u>Analyte</u>	<u>(ppb)</u>	<u>(ppb)</u>	Limit (ppb)	Finding	Limit (ppb)	Finding
	Total Arsenic	151.4	BLQ	200.0	Pass	1500.0	NA
	Cadmium	151.4	BLQ	200.0	Pass	500.0	NA
	Total Mercury	75.7	BLQ	100.0	Pass	1500.0	NA
	Lead	151.4	BLQ	500.0	Pass	1000.0	NA

Note "NT": Not Tested; "ND": Not Detected; "BLQ": Below limit of Quantification.

[J] Microbial Contaminants Analysis Metrc ID Tag: 1A40A0100000E11000038837

Analyst(s): MC

Microbial Contaminants were measured using a quantitative PCR (qPCR) technique from which the resulting Cq values were converted to colony forming units per gram (CFU/g) following SHMA SOP-700-MA; SOP-701-GA; SOP-702-GA; SOP-703-GA; SOP-704-GA.

	Result				
<u>Analyte</u>	(CFU/g)	<u>Datafile</u>	Analysis Date	Limit (CFU/g)	Finding
Total Coliforms (CC)	ND	PCR-20220215_CURC_16_COL	02/17/22	1.00E+03	Pass
Total Yeast and Mold (YM)	ND	PCR-20220215_CURC_16_TYM	02/17/22	1.00E+04	Pass
Total Viable Aerobic Bacteria (TAC)	ND	PCR-20220215_16_TAC-rr	02/17/22	1.00E+05	Pass
Bile-Tolerant Gram-Neg. Bacteria (BTGN)	ND	PCR-20220215_CURC_16_BTGN	02/17/22	1.00E+03	Pass

Note: "NT": Not Tested; "ND" Not Detected. Enterobacteriaceae is the family of bacteria also known as Bile-Tolerant Gram-Negative bacteria.

Item Name: CL,Flower,(H)Lemon Lava,,,,Bulk

[K] Pathogenic Bacteria Results Datafile: PCR-20220215_16_D2 Metrc ID Tag: 1A40A0100000E11000038837

02/17/22

Analyst(s):

The presence or absence of STEC E. coli and Salmonella spp. was determined by plating samples on selective chromogenic medium. Samples were incubated for a minimum of 18 hours prior to plating and analyzed following SHMA SOP-700-MA.

<u>Analyte</u>	<u>Result</u>	Analysis Date	<u>Limit</u>	Finding
STEC E. coli	Not Detected	02/17/22	Detection in 1.0 g	Pass
Salmonella spp.	Not Detected	02/17/22	Detection in 1.0 g	Pass

Note: "NT": Not Tested; "ND": Not Detected.

[L] Mycotoxins Results Metrc ID Tag: 1A40A0100000E11000038837 Analysis Date: Datafile: D:\Analyst Data\Projects\EVIO\Pesticides\Data\DataPGMY_A_20220216_JM_02.wiff (sample 27

Mycotoxins were measured using a High Performance Liquid Chromatograph equipped with a tandem Mass Spectrometer (HPLC-MS/MS) following SHMA SOP-002-GA; SOP-062-GA; SOP-070-GA.

<u>Analyte</u>	LOQ (ppb)	Result (ppb)	Limit (ppb)	<u>Finding</u>
Aflatoxin B1	10.0	ND	-	Tested
Aflatoxin B2	10.0	ND	-	Tested
Aflatoxin G1	10.0	ND	-	Tested
Aflatoxin G2	10.0	ND	-	Tested
Ochratoxin A	10.0	ND	-	Tested
Total Mycotoxins	-	0.0	20.0	Pass

Note "NT": Not Tested; "ND": Not Detected; "BLQ": Below limit of Quantification.

[M] Residual Solvent Results **Analysis Date:** Metrc ID Tag:

Residual Solvents were measured using a Headspace Sampler coupled to a Gas Chromatograph equipped with a tandem Mass Spectrometer (HS-GC-MS/MS) following SHMA SOP-011-GA; SOP-067-GA; SOP-010-GA.

<u>Analyte</u>	LOQ (ppm)	Result (ppm)	Limit (ppm)	Finding
Ethanol	NT	NT	NT	NT
Propane	NT	NT	NT	NT
iso-Butane	NT	NT	NT	NT
n-Butane	NT	NT	NT	NT
n-Pentane	NT	NT	NT	NT
Acetone	NT	NT	NT	NT
Hydrocarbons (Total)	-	NT	NT	NT

Note "NT": Not Tested; "ND": Not Detected; "BLQ": Below limit of Quantification.



Item Name: CL,Flower,(H)Lemon Lava,,,,Bulk

[N] Pesticides Results Metrc ID Tag: 1A40A0100000E11000038837 Analysis Date: 02/17/22 Datafile: D:\Analyst Data\Projects\EVIO\Pesticides\Data\DataPGMY_A_20220216_JM_02.wiff (sample 27 Analyst(s): LB

Pesticides were measured using a High Performance Liquid Chromatograph equipped with a tandem Mass Spectrometer (HPLC MS/MS) following SHMA SOP-002-GA; SOP-062-GA; SOP-070-GA.

<u>Analyte</u>	LOQ (ppb)	Result (ppb)	<u>Limit (ppb)</u>	<u>Finding</u>
Bifenazate	5.0	ND	10.0	Pass
Bifenthrin	5.0	ND	10.0	Pass
Cyfluthrin	5.0	ND	10.0	Pass
Etoxazole	5.0	ND	10.0	Pass
Imazalil	5.0	ND	10.0	Pass
Imidacloprid	5.0	ND	10.0	Pass
Myclobutanil	5.0	ND	10.0	Pass
Spiromesifen	5.0	ND	10.0	Pass
Trifloxystrobin	5.0	ND	10.0	Pass

Note "NT": Not Tested; "BLQ": Below Limit of Quantification; "ND": Not Detected

[O] Vitamin E Acetate Results Metrc ID Tag: NT Analysis Date: NT

Datafile: NT

Analyst(s): NT

Pesticides were measured using a High Performance Liquid Chromatograph equipped with a tandem Mass Spectrometer (HPLC MS/MS) following SHMA SOP-002-GA; SOP-062-GA; SOP-070-GA.

Analyte LOD (ppb) Result (ppb) Limit (ppb) Finding

Vitamin E Acetate - NT - NT

Note "NT": Not Tested; "LOD": Limit of Detection

[P] Terpenes Profile Metrc ID Tag: NT Analysis Date: NT
Datafile: NT Analyst(s): NT

Terpenes were measured using a Headspace Sampler coupled to a Gas Chromatograph equipped with a tandem Mass Spectrometer (HS-GC-MS/MS) following SHMA SOP-011-GA; SOP-067-GA; SOP-010-GA.

<u>Terpenes</u>	<u>LOD (%)</u>	Result (%)	Result (mg/g)
alpha-Pinene	NT	NT	NT
beta-Pinene	NT	NT	NT
beta-Myrcene	NT	NT	NT
Limonene	NT	NT	NT
Terpinolene	NT	NT	NT
Linalool	NT	NT	NT
Caryophyllene	NT	NT	NT
alpha-Humulene	NT	NT	NT
Caryophyllene oxide	NT	NT	NT
alpha-Bisabolol	NT	NT	NT
Total Terpenes	-	-	-

Note NT: Not Tested.



Item Name: CL,Flower,(H)Lemon Lava,,,Bulk

QA/QC Section

[Q] Cannabinoid QC
Analysis Date: 02/18/22
Datafile: LCS_POTENCY_A_20220217_LK_02_2172022_029.lcd
Analyst(s): AS

QC Notes: Quality control checks were prepared at known concentrations and run alongside batch samples.

<u>Cannabinoid</u>	Measured Conc. (mg/mL)	Expected Conc. (mg/mL)	% Recovery
Tetrahydrocannabinolic acid (THCA)	0.044	0.046	95%
$\Delta 9$ -Tetrahydrocannabinol ($\Delta 9$ -THC)	0.043	0.045	95%
Cannabidiolic acid (CBDA)	0.049	0.047	106%
Cannabidiol (CBD)	0.048	0.045	108%
Cannabinol (CBN)	0.047	0.045	103%
Cannabichromene (CBC)	0.049	0.046	107%
Cannabigerolic acid (CBGA)	0.045	0.047	97%
Cannabigerol (CBG)	0.050	0.046	108%
Cannabidivarin (CBDV)	0.045	0.045	101%
Tetrahydrocannabivarin (THCV)	0.047	0.045	104%
Δ 8-Tetrahydrocannabinol (Δ 8-THC)	0.048	0.045	107%

[R] Heavy Metals QC Analysis Date: 02/17/22

Datafile: hm_b_20220216_sd_th\DIG-20220215_SD LCS.092 Analyst(s): TH

QC Notes: Quality control checks were prepared at known concentrations and run alongside batch samples.

	Measured Conc.	Expected Conc.	
<u>Analyte</u>	<u>(ppb)</u>	<u>(ppb)</u>	% Recovery
Total Arsenic	3.8	4.0	96%
Cadmium	3.9	4.0	96%
Total Mercury	4.2	4.0	104%
Lead	3.6	4.0	90%

[S] Microbial Contaminants QC

Analysis Date: 2/17/2022

Analyst(s): MG

QC Notes: Quality control checks are included with each run to assess the success of instrument run and polymerase chain reaction.

			Negative	
<u>Target</u>	<u>Datafile</u>	Positive Control Cq	Control Cq	Finding
Total Coliforms (CC)	PCR-20220215_CURC_16_COL	13.55	N/A	Pass
Total Yeast and Mold (YM)	PCR-20220215_CURC_16_TYM	14.62	N/A	Pass
Total Viable Aerobic Bacteria (TAC)	PCR-20220215_16_TAC-rr	12.19	N/A	Pass
Bile-Tolerant Gram-Neg. Bacteria (BTGN)	PCR-20220215_CURC_16_BTGN	13.64	N/A	Pass
Expected Value		Cq ≤ 35	Cq>35 or N/A	

Note: "NT": Not Tested; "ND" Not Detected.

Item Name: CL,Flower,(H)Lemon Lava,,,,Bulk

[T] Pathogenic Bacteria QC

Analysis Date: 2/17/2022

Analyst(s): MG

QC Notes: Quality control checks are included with each run to assess the success of sample plating.

Negative <u>Datafi</u>le **Target** Positive Control Cq Control Cq **Finding** STEC E. coli PCR-20220215_16_D2 13.31 N/A Pass Salmonella spp. PCR-20220215_16_D2 17.17 N/A **Pass Expected Value** *Cq* ≤ 35 Cq>35 or N/A

Note: "NT": Not Tested; "ND": Not Detected.

[U] Mycotoxins QC Analysis Date: 02/17/22

Datafile: D:\Analyst Data\Projects\EVIO\Pesticides\Data\DataPGMY_A_20220216_JM_02.wiff (sample 4)

Analyst(s):

LB

QC Notes: Quality control checks were prepared at known concentrations and run alongside batch samples.

<u>Analyte</u>	Measured Conc. (ppb)	Expected Conc. (ppb)	% Recovery
Aflatoxin B1	1.7	1.7	101%
Aflatoxin B2	2.0	1.7	115%
Aflatoxin G1	2.0	1.7	118%
Aflatoxin G2	2.1	1.7	126%
Ochratoxin A	1.9	1.7	112%

[V] Residual Solvent QC Analysis Date: NT
Datafile: NT Analyst(s): NT

QC Notes: Quality control checks were prepared at known concentrations and run alongside batch samples.

<u>Analyte</u>	Measured Conc. (ppb)	Expected Conc. (ppb)	% Recovery
Ethanol	NT	NT	NT
iso-Butane	NT	NT	NT
Propane	NT	NT	NT
n-Butane	NT	NT	NT
n-Pentane	NT	NT	NT
Acetone	NT	NT	NT

[W] Pesticides QC Analysis Date: 02/17/22

Datafile: D:\Analyst Data\Projects\EVIO\Pesticides\Data\DataPGMY_A_20220216_JM_02.wiff (sample 27 Analyst(s):

QC Notes: Quality control checks were prepared at known concentrations and run alongside batch samples.

<u>Analyte</u>	Measured Conc (ppb)	Expected Conc (ppb)	% Recovery	<u>Finding</u>
Bifenazate	0.9	0.8	120%	Pass
Bifenthrin	1.1	0.8	145%	Pass
Cyfluthrin	1.0	0.8	133%	Pass
Etoxazole	0.8	0.8	106%	Pass
Imazalil	0.9	0.8	111%	Pass
Imidacloprid	1.1	0.8	148%	Pass
Myclobutanil	1.1	0.8	138%	Pass
Spiromesifen	0.8	0.8	100%	Pass
Trifloxystrobin	0.9	0.8	111%	Pass



Item Name: CL,Flower,(H)Lemon Lava,,,Bulk

[X] Vitamin E Acetate QC	Analysis Date:	NT						
Datafile: NT	Analyst(s):	NT						
QC Notes: Quality control checks were prepared at known concentrations and run alongside batch samples.								
Analyte	Observed Besult	Franciska d Dografik	Findin -					
	Observed Result	Expected Result	<u>Finding</u>					
Vitamin E Acetate	NT	NT	NT					

- End of Analytical Report -