

Analytical Report

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CURC-38029

Report Submitted: 10/20/2021

[B] Client Info

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

RMD385-C License: **Metrc Manifest:** 768303 **Date Received:** 10/12/2021

[C] Sample Identification

METRC Batch ID: 210909CC.F8-1-D METRC Sample ID: 1A40A0100000E11000038029 **METRC Source ID:** 1A40A0100000E11000032475

ME Batch ID: NΑ

[D] Sample Properties

Sample Weight (g): 7.0

Serving Size (g): NA

Production Stage: Finished Plant Material

"-" = Not Tested

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

> **Retail Name:** CL,Flower,(I)Concord Crush,,,Bulk

[F] Results for Requested Analyses

Terpene **Profile**

Y = Tested

Pesticides

P = Pass

Total Yeast and Mold

Cannabinoid

Pathogenic Ρ Bacteria

Ρ

Bacteria

Vitamin E

[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.







James J. Kocis **Laboratory Director**



Item Name: CL,Flower,(I)Concord Crush,,,Bulk

[H] Cannabinoid Profile Metrc ID Tag: 1A40A0100000E11000038029 Analysis Date: 10/16/21
Datafile: CURC-38029_POTENCY_A_20211013_LK_01_10132021_013.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)	0.097	17.328	173.28	N/A
Δ 9-Tetrahydrocannabinol (Δ 9-THC)	0.121	0.170	1.70	N/A
Cannabidiolic acid (CBDA)	0.126	ND	ND	N/A
Cannabidiol (CBD)	0.120	ND	ND	N/A
Cannabinol (CBN)	0.110	ND	ND	N/A
Cannabichromene (CBC)	0.110	ND	ND	N/A
Cannabigerolic acid (CBGA)	0.114	0.345	3.45	N/A
Cannabigerol (CBG)	0.109	0.162	1.62	N/A
Cannabidivarin (CBDV)	0.110	ND	ND	N/A
Tetrahydrocannabivarin (THCV)	0.110	ND	ND	N/A
Δ 8-Tetrahydrocannabinol (Δ 8-THC)	0.110	ND	ND	N/A
Total Available Cannabinoids	-	18.005	180.05	-
Note "NT": Not Tested; "ND": Not Detected; "BLQ": Below limit of Quantification. Percentage dry-weight-basis.				

[I] Heavy Metals Analysis Metrc ID Tag: 1A40A0100000E11000038029 Analysis Date: 10/12/21
Datafile: HM_A_20211016_SD_RB DIG-20211012_DJC_01 CURC-38029 Analysis LB

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

	LOQ	<u>Result</u>	All Us	<u>es</u>	Ingestion	Only
<u>Analyte</u>	<u>(ppb)</u>	<u>(ppb)</u>	Limit (ppb)	Finding	Limit (ppb)	Finding
Total Arsenic	151.4	ND	200.0	Pass	1500.0	NA
Cadmium	151.4	ND	200.0	Pass	500.0	NA
Total Mercury	75.7	ND	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: 1A40A0100000E11000038029

Analyst(s): M

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)	<u>Finding</u>
Total Coliforms (CC)	ND	PCR-20211012_COL	10/14/21	1.00E+03	Pass
Total Yeast and Mold (YM)	2.22E+03	PCR-20211012_TYM	10/14/21	1.00E+04	Pass
Total Viable Aerobic Bacteria (TAC)	ND	PCR-20211012_TAC	10/14/21	1.00E+05	Pass
Bile-Tolerant Gram-Neg. Bacteria (BTGN)	ND	PCR-20211012_BTGN	10/14/21	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,(I)Concord Crush,,,,Bulk

[K] Pathogenic Bacteria Results

Metrc ID Tag: 1A40A0100000E11000038029

10/14/21 Analyst(s):

Datafile: PCR-20211012_D2

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	10/14/21	Detection in 1.0 g	Pass
Salmonella spp.	Not Detected	10/14/21	Detection in 1.0 g	Pass

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

[L] Mycotoxins Results Metrc ID Tag: 1A40A0100000E11000038029 Analysis Date: Datafile: D:\Analyst Data\Projects\EVIO\Pesticides\Data\DataPGMY_A_20211018_JM_02.wiff (sample 19

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)	<u>Limit (ppb)</u>	<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)	<u>Finding</u>
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,(I)Concord Crush,,,,Bulk

[N] Pesticides Results Metrc ID Tag: 1A40A0100000E11000038029 Analysis Date: 10/19/21
Datafile: D:\Analyst Data\Projects\EVIO\Pesticides\Data\DataPGMY_A_20211018_JM_02.wiff (sample 19 Analyst(s): RK

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)	Limit (ppb)	<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.

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

Note NT: Not Tested.



Item Name: CL,Flower,(I)Concord Crush,,,Bulk

QA/QC Section

[Q] Cannabinoid QC
Analysis Date: 10/16/21
Datafile: LCS_POTENCY_A_20211013_LK_01_10132021_056.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)	0.043	0.046	94%
Δ 9-Tetrahydrocannabinol (Δ 9-THC)	0.043	0.047	93%
Cannabidiolic acid (CBDA)	0.043	0.047	92%
Cannabidiol (CBD)	0.043	0.045	97%
Cannabinol (CBN)	0.044	0.046	97%
Cannabichromene (CBC)	0.046	0.045	102%
Cannabigerolic acid (CBGA)	0.044	0.047	95%
Cannabigerol (CBG)	0.050	0.045	111%
Cannabidivarin (CBDV)	0.043	0.045	97%
Tetrahydrocannabivarin (THCV)	0.045	0.047	97%
Δ8-Tetrahydrocannabinol (Δ8-THC)	0.045	0.044	102%

[R] Heavy Metals QC Analysis Date: 10/12/21
Datafile: HM_A_20211016_SD_RB DIG-20211012_DJC1 MS-CO20210125 Analyst(s): LB

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	4.1	4.0	102%
Cadmium	4.2	4.0	105%
Total Mercury	4.0	4.0	100%
Lead	4.4	4.0	110%

[S] Microbial Contaminants QC Analysis Date: 10/14/2021
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-20211012_COL	15.66	N/A	Pass
Total Yeast and Mold (YM)	PCR-20211012_TYM	17.79	N/A	Pass
Total Viable Aerobic Bacteria (TAC)	PCR-20211012_TAC	12.29	N/A	Pass
Bile-Tolerant Gram-Neg. Bacteria (BTGN)	PCR-20211012_BTGN	14.64	N/A	Pass
Expected Value		Cq ≤ 35	Cq>35 or N/A	

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

Item Name: CL,Flower,(I)Concord Crush,,,Bulk

[T] Pathogenic Bacteria QC

Analysis Date:

10/14/2021

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

			<u>Negative</u>	
<u>Target</u>	<u>Datafile</u>	Positive Control Cq	Control Cq	Finding
STEC E. coli	PCR-20211012_D2	11.31	N/A	Pass
Salmonella spp.	PCR-20211012_D2	19.59	N/A	Pass
Expected Value		Cq ≤ 35	Cq>35 or N/A	

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

[U] Mycotoxins QC Analysis Date: 10/19/21

Datafile: D:\Analyst Data\Projects\EVIO\Pesticides\Data\DataPGMY_A_20211018_IM_02.wiff (sample 4)

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	2.4	2.1	114%
Aflatoxin B2	2.4	2.1	117%
Aflatoxin G1	2.3	2.1	108%
Aflatoxin G2	2.2	2.1	104%
Ochratoxin A	1.9	2.1	90%

Analysis Date: [V] Residual Solvent QC NT Datafile: NT 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
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: 10/19/21

Datafile: D:\Analyst Data\Projects\EVIO\Pesticides\Data\DataPGMY_A_20211018_JM_02.wiff (sample 19

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	1.0	1.0	103%	Pass
Bifenthrin	1.3	1.0	135%	Pass
Cyfluthrin	1.4	1.0	134%	Pass
Etoxazole	1.1	1.0	113%	Pass
Imazalil	1.2	1.0	117%	Pass
Imidacloprid	1.1	1.0	104%	Pass
Myclobutanil	1.1	1.0	107%	Pass
Spiromesifen	0.9	1.0	89%	Pass
Trifloxystrobin	1.0	1.0	102%	Pass



Item Name: CL,Flower,(I)Concord Crush,,,Bulk

	[X] Vitamin E Acetate QC					
Datafile: NT	e: NT Analyst(s):					
QC Notes: Quality control checks were	prepared at known concentration	is and run alongside batch sam	oles.			
Analyte	Observed Result	Function Beaut	Finding			
Vitamin E Acetate	Observed Result NT	Expected Result NT	<u>Finding</u> NT			

- End of Analytical Report -