

## **Analytical Report**

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

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

HMA Report ID

ARLC-24524

Report Submitted: 8/3/2022

## [B] Client Info

ARL Healthcare 177 John Vertente Blvd. New Bedford, MA 02745 se: RMD1085-C

License: RMD1085-C
Metrc Manifest: 1170907
Date Received: 7/28/2022

[C] Sample Identification

 METRC Batch ID:
 Lambs Bread H7.7.22 F6 B5 T5

 METRC Sample ID:
 1A40A0100001AF5000024524

 METRC Source ID:
 1A40A0100001AF5000024518

ME Batch ID: NA

[D] Sample Properties

Sample Weight (g): 6.5

Serving Size (g): NA

[E] Product Characterization

Production Stage: Finished Plant Material

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

Retail Name: Lambs Bread Bulk Flower

[F] Results for Requested Analyses

Y = T

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Cannabinoid Y
Profile

Terpene Profile

Heavy Metals Residual Solvents Pesticides P

P = Pass

Total Yeast and Mold

Mycotoxins P

Pathogenic Bacteria 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. Where statements of conformity are reported ('pass' vs. 'fail'), the simple acceptance decision rule is applied.

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: Lambs Bread Bulk Flower

[H] Cannabinoid Profile Metrc ID Tag: 1A40A0100001AF5000024524 Analysis Date: 07/31/22

Datafile: ARLC-24524\_1A40A0100001AF5000024524\_POTENCY\_A\_20220728\_JM\_01\_7282022\_009.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	26.1386	261.386	N/A	
$\Delta$ 9-Tetrahydrocannabinol ( $\Delta$ 9-THC)	0.1206	0.3246	3.246	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	0.8461	8.461	N/A	
Cannabigerol (CBG)	0.1089	0.1600	1.600	N/A	
Cannabidivarin (CBDV)	0.1097	ND	ND	N/A	
Tetrahydrocannabivarin (THCV)	0.1098	ND	ND	N/A	
$\Delta$ 8-Tetrahydrocannabinol ( $\Delta$ 8-THC)	0.1096	ND	ND	N/A	
Total Available Cannabinoids	-	27.4693	274.693	-	
Note "NT": Not Tested; "ND": Not Detected; "BLQ": Below limit of Quantification. Percentage dry-weight-basis.					

[I] Heavy Metals Analysis Metrc ID Tag: 1A40A0100001AF5000024524 Analysis Date: 07/29/22

Datafile: HM\_A\_20220728\_TH\_SD DIG-20220728\_SD2 ARLC-24524 Analysis Date: 07/29/22

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

	<u>LOQ</u>	<u>Result</u>	All Use	<u>es</u>	<u>Ingestion</u>	<u>Only</u>
<u>Analyte</u>	<u>(ppb)</u>	<u>(ppb)</u>	Limit (ppb)	<b>Finding</b>	Limit (ppb)	<b>Finding</b>
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: 1A40A0100001AF5000024524

Analyst(s): CR

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-701-GA; SOP-702-GA; SOP-703-GA; SOP-704-GA.

	Result				
<u>Analyte</u>	(CFU/g)	<u>Datafile</u>	<b>Analysis Date</b>	Limit (CFU/g)	<b>Finding</b>
Total Coliforms (CC)	ND	PCR-20220728_COL	07/31/22	1.00E+03	Pass
Total Yeast and Mold (YM)	ND	PCR-20220728_TYM	07/31/22	1.00E+04	Pass
Total Viable Aerobic Bacteria (TAC)	ND	PCR-20220728_TAC	07/31/22	1.00E+05	Pass
Bile-Tolerant Gram-Neg, Bacteria (BTGN)	ND	PCR-20220728_BTGN	07/31/22	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: Lambs Bread Bulk Flower

[K] Pathogenic Bacteria Results

Metrc ID Tag: 1A40A0100001AF5000024524

Analysis Date: 07

Analyst(s):

0//31/22

Datafile: PCR-20220728\_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>	<b>Finding</b>
STEC E. coli	Not Detected	07/31/22	Detection in 1.0 g	Pass
Salmonella spp.	Not Detected	07/31/22	Detection in 1.0 g	Pass

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

[L] Mycotoxins Results Metrc ID Tag: 1A40A0100001AF5000024524 Analysis Date: 07/31/22 Datafile: (Path: D:\Analyst Data\Projects\SHMA PGMY\Data\DataPGMY\_B\_20220728\_JM\_01.wiff), (samp Analyst(s): JM

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 Metrc ID Tag: NT Analysis Date: NT

Analyst(s): NT

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

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

Item Name: Lambs Bread Bulk Flower

[N] Pesticides Results

Metrc ID Tag: 1A40A0100001AF5000024524 Analysis Date: 07/31/22

Datafile: (Path: D:\Analyst Data\Projects\SHMA PGMY\Data\DataPGMY\_B\_20220728\_JM\_01.wiff), (samp Analyst(s): JM

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: 1A40A0100001AF5000024524 Analysis Date: 8/2/2022

Datafile: ARLC-24524\_1A40A0100001AF5000024524\_717-20220728\_BJ2\_7302022\_38.qgd Analyst(s): BK

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>	LOD (%)	Result (%)	Result (mg/g)
alpha-Pinene	0.0006	0.0393	0.393
beta-Pinene	0.0004	0.0640	0.640
beta-Myrcene	0.0006	2.1305	21.305
Limonene	0.0005	0.2313	2.313
Terpinolene	0.0005	0.0099	0.099
Linalool	0.0003	0.0844	0.844
Caryophyllene	0.0008	0.2749	2.749
alpha-Humulene	0.0003	0.1133	1.133
Caryophyllene oxide	0.0017	0.0222	0.222
alpha-Bisabolol	0.0009	0.0108	0.108
Total Terpenes	-	2.9806	29.806

Note NT: Not Tested.



Item Name: Lambs Bread Bulk Flower

## **QA/QC Section**

[Q] Cannabinoid QC Analysis Date: 07/31/22 Datafile: LCS\_POTENCY\_A\_20220728\_JM\_01\_7282022\_004.lcd Analysis Date: 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)	0.046	0.046	100%
$\Delta$ 9-Tetrahydrocannabinol ( $\Delta$ 9-THC)	0.045	0.046	99%
Cannabidiolic acid (CBDA)	0.050	0.047	107%
Cannabidiol (CBD)	0.049	0.045	109%
Cannabinol (CBN)	0.047	0.045	104%
Cannabichromene (CBC)	0.047	0.045	105%
Cannabigerolic acid (CBGA)	0.050	0.046	110%
Cannabigerol (CBG)	0.049	0.046	107%
Cannabidivarin (CBDV)	0.048	0.045	106%
Tetrahydrocannabivarin (THCV)	0.046	0.046	101%
Δ8-Tetrahydrocannabinol (Δ8-THC)	0.045	0.045	101%

[R] Heavy Metals QC Analysis Date: 07/29/22
Datafile: HM\_A\_20220728\_TH\_SD DIG-20220728\_SD2 LCS 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	3.5	4.0	87%
Cadmium	3.6	4.0	91%
Total Mercury	3.6	4.0	90%
Lead	3.6	4.0	91%

[S] Microbial Contaminants QC Analysis Date: 7/31/2022

Analyst(s): CR

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

			ivegative	
<u>Target</u>	<u>Datafile</u>	<b>Positive Control Cq</b>	Control Cq	<b>Finding</b>
Total Coliforms (CC)	PCR-20220728_COL	13.14	N/A	Pass
Total Yeast and Mold (YM)	PCR-20220728_TYM	13.22	N/A	Pass
Total Viable Aerobic Bacteria (TAC)	PCR-20220728_TAC	21.13	N/A	Pass
Bile-Tolerant Gram-Neg. Bacteria (BTGN)	PCR-20220728_BTGN	22.54	N/A	Pass
Expected Value		Cq ≤ 35	>35/>30 (TAC) or N/A	

Negative

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

Item Name: Lambs Bread Bulk Flower

[T] Pathogenic Bacteria QC

Analysis Date: 7/31/2022

Applyst/s): CP

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	<b>Finding</b>
STEC E. coli	PCR-20220728_D2	12.78	N/A	Pass
Salmonella spp.	PCR-20220728_D2	17.51	N/A	Pass
Expected Value		Cq ≤ 35	Cq>35 or N/A	

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

[U] Mycotoxins QC Analysis Date: 07/31/22

Datafile: (Path: D:\Analyst Data\Projects\SHMA PGMY\Data\DataPGMY\_B\_20220728\_JM\_01.wiff), (sample I 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
Aflatoxin B1	1.5	1.5	104%
Aflatoxin B2	1.7	1.5	111%
Aflatoxin G1	1.7	1.5	115%
Aflatoxin G2	1.7	1.5	116%
Ochratoxin A	1.6	1.5	109%

[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: 07/31/22

Datafile: (Path: D:\Analyst Data\Projects\SHMA PGMY\Data\DataPGMY\_B\_20220728\_JM\_01.wiff), (samp Analyst(s): JM

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

<u>Analyte</u>	Measured Conc (ppb)	<b>Expected Conc (ppb)</b>	% Recovery	<u>Finding</u>
Bifenazate	0.9	0.7	126%	Pass
Bifenthrin	0.5	0.7	66%	Pass
Cyfluthrin	0.8	0.7	109%	Pass
Etoxazole	0.9	0.7	119%	Pass
Imazalil	0.8	0.7	105%	Pass
Imidacloprid	0.9	0.8	115%	Pass
Myclobutanil	0.9	0.8	114%	Pass
Spiromesifen	0.9	0.8	118%	Pass
Trifloxystrobin	0.8	0.7	104%	Pass



Item Name: Lambs Bread Bulk Flower

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

- End of Analytical Report -