Certificate of Analysis

Analytical Test Report

Client:	Final Report	MCR-S22-14947 Rev.01.00	Laboratory:
Rise Holdings, Inc. 28 Appleton Street Holyoke, MA 01040	Report Date:	26 MARCH 2022	MCR Labs 85 Speen St. Lower Level Framingham, MA 01701 508-872-6666
	METRC Tag: **METRC Source Tag:**	**1A40A0100000B6E000005706** **1A40A0100000B6E000005677**	

Sample ID #	Sample Name	Batch	Matrix	Date Received	Date Tested	Sample Weight
MCR-S22-14947	Flower	1027213CH-C-1	Flower	21 March 2022	22-25 March 2022	5.86 g

The test results presented in this report are accurate, complete, and compliant with the MCR Labs quality control criteria.

Authorization

Carlos Cruz
Data Quality Manager

ACCREDITED
CERT# 6562.01

Case Narrative:

This sample was received by MCR Labs from a RMD agent in a sealed container. For cannabinoids, the sample was extracted using organic solvents and analyzed via High Performance Liquid Chromatography (HPLC-UV). For microbiological contaminants, the sample was prepared using cultured enrichments, was incubated for set periods of time, and analyzed via an automated Most Probable Number (MPN) methodology. For pathogenic bacterial contaminants, the sample was analyzed via a quantitative Polymerase Chain Reaction (qPCR). Pathogenic screen includes all six STEC strains, including O157. For mycotoxin and pesticide contaminants, the sample was extracted using organic solvents, and analyzed via Liquid Chromatography - Tandem Mass Spectrometry (LC-MS/MS). For heavy metals, the sample was extracted using nitric acid and microwave digestion, and analyzed via Inductively Coupled Plasma Mass Spectrometry (ICP-MS). For terpenes, the sample was analyzed via Gas Chromatography – Flame Ionization Detection with Headspace Autosampler. The collected data was compared to data collected from analytical reference standards at known concentrations. QA/QC data is available upon request. Unless specified by regulation, measurement uncertainty is not taken into account when reporting results and making a statement of conformity. Values reported below quantitation limits are for informational purposes.

Requested Testing:

Test	Code	Procedure	Analytes Tested	Disposition
Cannabinoid Profile	CN	MCR-TM-0011	CBDVA, CBDV, CBDA, CBGA, CBG, CBD, THCV, THCVA, CBCV, CBN, CBNA, D9-THC, D8-THC, CBL, THCA, CBC, CBCA, CBLA, CBT	N/A
Microbiological Screen	MB	MCR-TM-0006 MCR-TM-0012	Bacterial (Total Aerobic, Total Coliform, Bile-Tolerant Gram Negative), Yeast and Mold, Pathogenic (E. coli, Salmonella)	Pass
Mycotoxin Screen	MY	MCR-TM-0009	Aflatoxin B1, Aflatoxin B2, Aflatoxin G1, Aflatoxin G2, Ochratoxin A	Pass
Heavy Metals Screen	HM	MCR-TM-0008	Arsenic (As), Cadmium (Cd), Lead (Pb), Mercury (Hg)	Pass
Pesticides Screen	PS	MCR-TM-0009	Bifenazate, Bifenthrin, Cyfluthrin, Etoxazole, Imazalil, Imidacloprid, Myclobutanil, Spiromesifen, Trifloxystrobin	Pass
Terpene Screen	TP	MCR-TM-0016*	α-Pinene, Camphene, β-Myrcene, β-Pinene, δ-3-Carene, α-Terpinene, Ocimene, δ-Limonene, p-Cymene, β-Ocimene, Eucalyptol, γ-Terpinene, Terpinolene, Linalool, Isopulegol, Geraniol, β-Caryophyllene, α-Humulene, Nerolidol 1, Nerolidol 2, Guaiol, Caryophyllene Oxide, α-Bisabolol	N/A

*Result is non-accredited.

Cannabinoid Profile [MCR-TM-0011] Analyst: EB/TW/JG *Test Date: 22 Mar 22*

The sample was analyzed for cannabinoids via High Performance Liquid Chromatography (HPLC-UV). The collected data was compared to data collected from certified analytical reference standards at known concentrations.

Table 1 - S22-14947 Flower 1027213CH-C-1 Flower Cannabinoid Testing

Analyte	Cannabinoid	Conc. (weight %)	Conc. (mg/g)	LOQ (weight %)	LOD (weight %)
CBDVA	Cannabidivarinic acid	ND	ND	0.04%	0.01%
CBDV	Cannabidivarin	ND	ND	0.04%	0.01%
CBDA	Cannabidiolic acid	ND	ND	0.04%	0.01%
CBGA	Cannabigerolic acid	0.3%	3	0.04%	0.01%
CBG	Cannabigerol	ND	ND	0.04%	0.02%
CBD	Cannabidiol	ND	ND	0.04%	0.01%
THCV	Tetrahydrocannabivarin	ND	ND	0.04%	0.01%
THCVA	Tetrahydrocannabivarinic acid	0.1%	1	0.04%	0.01%
CBCV	Cannabichromevarin	ND	ND	0.04%	0.01%
CBN	Cannabinol	ND	ND	0.04%	0.01%
CBNA	Cannabinolic acid	ND	ND	0.04%	0.01%
Δ9-THC	Δ9-Tetrahydrocannabinol	1.6%	16	0.04%	0.01%
Δ8-THC	Δ8-Tetrahydrocannabinol	ND	ND	0.04%	0.01%
CBL	Cannabicyclol	ND	ND	0.04%	0.01%
THCA	Tetrahydrocannabinolic acid	18.2%	182	0.04%	0.01%
CBC	Cannabichromene	ND	ND	0.04%	0.01%
CBCA	Cannabichromenic acid	0.2%	2	0.20%	0.02%
CBLA	Cannabicyclolic acid	ND	ND	0.04%	0.01%
CBT	Cannabicitran	ND	ND	0.04%	0.01%
Total THC = Δ9-THC + (THCA * 0.877)		17.6%	176	N/A	N/A
Total CBD = CBD + (CBDA * 0.877)		ND	ND	N/A	N/A

Note: There are no limits established by the Massachusetts Department of Public Health for cannabinoid concentrations. ND = Not Detected. LOQ = Limit of Quantitation. LOD = Limit of Detection.

Microbiological Screen [MCR-TM-0006] *Analyst: TJS/AL* *Test Date: 22-25 Mar 22*

The sample was analyzed for microbiological contaminants via an automated Most Probable Number (MPN) methodology with cultured enrichments.

Table 2 - S22-14947 Flower 1027213CH-C-1 Flower Microbiological Testing

Test ID	Test Analysis	Results	Unit	Limits	Disposition
22-14947-AC	Total Viable Aerobic Bacteria	=2.0 x 10^3	CFU/g	10^5 CFU/g	Pass
22-14947-YM	Total Yeast and Mold	=100	CFU/g	10^4 CFU/g	Pass
22-14947-CC	Total Coliforms	<100	CFU/g	10^3 CFU/g	Pass
22-14947-EB	Total Bile-Tolerant Gram Negative Bacteria	<100	CFU/g	10^3 CFU/g	Pass

Note: CFU = colony forming unit. Testing limits established by the Massachusetts Department of Public Health, Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries, Exhibit 6.

Pathogenic Bacterial Screen [MCR-TM-0012] *Analyst: JDM* *Test Date: 24 Mar 22*

The sample was analyzed for pathogenic bacterial contamination via a quantitative Polymerase Chain Reaction (qPCR).

Table 3 - S22-14947 Flower 1027213CH-C-1 Flower Pathogen Testing

Test ID	Test Analysis	Result	Units	Limits	Disposition
S22-14947-ECPT	*STEC*	Not Detected	N/A	Not Detected in 1g	Pass
S22-14947-SPT	*Salmonella*	Not Detected	N/A	Not Detected in 1g	Pass

Note: Testing limits established by the Massachusetts Department of Public Health, Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries, Exhibit 6. NT = Not tested. STEC = Shiga Toxin producing E. coli

*Result is non-accredited.

Mycotoxin Screen [MCR-TM-0009] Analyst: JG/TW/EB/TJS *Test Date: 22 Mar 22*

The sample was analyzed via Liquid Chromatography - Tandem Mass Spectrometry (LC-MS/MS).
The collected data was compared to data collected from analytical reference standards at known concentrations.

Table 4 - S22-14947 Flower 1027213CH-C-1 Flower Mycotoxin Testing

Test ID	Test Analysis	Result	LOD (ppb)	LOQ (ppb)	Limits (ppb)	Disposition
S22-14947-AFB1	*Aflatoxin B1*	Not Detected	3.3	10	20	Pass
S22-14947-AFB2	*Aflatoxin B2*	Not Detected	3.3	10	20	Pass
S22-14947-AFG1	*Aflatoxin G1*	Not Detected	3.3	10	20	Pass
S22-14947-AFG2	*Aflatoxin G2*	Not Detected	3.3	10	20	Pass
S22-14947-OTA	*Ochratoxin A*	Not Detected	5	10	20	Pass

Note: ND = Not Detected; LOD = Limit of Detection; LOQ = Limit of Quantitation; ppb = part per billion. Testing limits established by the Massachusetts Department of Public Health, Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries, Exhibit 6.

Heavy Metals Screen [MCR-TM-0008] Analyst: IG/PT *Test Date: 23 Mar 22*

The sample was analyzed via Inductively Coupled Plasma Mass Spectrometry. The collected data was compared to data collected from certified analytical reference standards at known concentrations.

Table 5 - S22-14947 Flower 1027213CH-C-1 Flower Heavy Metal Testing

Test ID	Test Analysis	Result, ppb	LOD ppb	LOQ ppb	Limits ppb	Disposition	Limits (ingestion) ppb	Disposition (ingestion)
S22-14947-HM	Arsenic	ND	39.0	118.1	200	Pass	1500	Pass
S22-14947-HM	Cadmium	ND	16.9	51.2	200	Pass	500	Pass
S22-14947-HM	Mercury	ND	19.3	58.4	100	Pass	1500	Pass
S22-14947-HM	Lead	ND	19.5	59.2	500	Pass	1000	Pass

Note: ND = Not Detected; LOD = Limit of Detection; LOQ = Limit of Quantitation; BQL = Below Quantitation Limit; ppb = part per billion. Testing limits established by the Massachusetts Department of Public Health, Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries, Exhibit 4.

*Result is non-accredited.

Pesticides Screen [MCR-TM-0009] ***Analyst: JG/TW/EB/TJS*** *Test Date: 22 Mar 22*

The sample was analyzed via Liquid Chromatography - Tandem Mass Spectrometry (LC-MS/MS).
The collected data was compared to data collected from analytical reference standards at known concentrations.

Table 6 - S22-14947 Flower 1027213CH-C-1 Flower Pesticide Testing

Test Analysis	Result, ppb	LOD ppb	LOQ ppb	Limits ppb	Disposition
Bifenazate	ND	125	375	750	Pass
Bifenthrin	ND	83.3	250	500	Pass
Cyfluthrin	ND	166.7	500	1000	Pass
Etoxazole	ND	58.3	175	350	Pass
Imazalil	ND	4.2	12.5	25	Pass
Imidacloprid	ND	50	150	300	Pass
Myclobutanil	ND	83.3	250	500	Pass
Spiromesifen	ND	333.3	1000	2000	Pass
Trifloxystrobin	ND	91.7	275	550	Pass

Note: ND = Not Detected; LOD = Limit of Detection; LOQ = Limit of Quantitation; ppb = part per billion; N/A = not available.
Testing limits established by the Massachusetts Department of Public Health, Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries, Exhibit 5.

Terpene Profile [MCR-TM-0016]* Analyst: AL/JW *Test Date: 22 Mar 22*

The sample was analyzed via Gas Chromatography – Flame Ionization Detection with Headspace Autosampler. The collected data was compared to data collected from certified analytical reference standards at known concentrations.

Table 7 - S22-14947 Flower 1027213CH-C-1 Flower Terpene Testing

Terpene	Conc. (weight %)*
α-Pinene	0.06%*
Camphene	0.02%*
β-Myrcene	0.52%*
β-Pinene	0.11%*
δ 3-Carene	0.01%*
α-Terpinene	0.01%*
Ocimene	ND*
δ-Limonene	0.54%*
p-Cymene	0.01%*
β-Ocimene	0.01%*
Eucalyptol	0.14%*
γ-Terpinene	0.01%*
Terpinolene	0.02%*
Linalool	0.22%*
Isopulegol	0.01%*
Geraniol	0.01%*
β-Caryophyllene	0.48%*
α-Humulene	0.14%*
Nerolidol 1	0.01%*
Nerolidol 2	0.01%*
Guaiol	0.01%*
Caryophyllene Oxide	0.02%*
α-Bisabolol	0.02%*
Sum	2.39%*

Note: ND = Not Detected.

END OF REPORT

*Result is non-accredited.