Certificate of Analysis

Analytical Test Report

Client:	Final Report	MCR-S21-59482 Rev.01.00	Laboratory:
Curaleaf Amesbury 10 Industrial Way Amesbury, MA 01913	Report Date:	3 OCTOBER 2021	MCR Labs 85 Speen St. Lower Level Framingham, MA 01701 508-872-6666
	METRC Tag: **METRC Source Tag:**	**1A40A0300000326000012500** **1A40A0300000326000012499**	

Sample ID #	Sample Name	Batch	Matrix	Date Received	Date Tested	Serving size weight
MCR-S21-59482	Gummy - Watermelon CL Classic 30mg	GUM.30.CC WM.210920.1	MIP	29 September 2021	30 September-03 October 2021	3.2 g

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

Authorization

Andy Moy
Data Manager

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO/IEC 17025
TESTING LABORATORY

This test is accredited under the laboratory's ISO/IEC 17025:2017 accreditation issued by ANSI National Accreditation Board. Refer to certificate and scope of accreditation AT-1853

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 stains, including O157. For mycotoxin contaminants, the sample was extracted using organic solvents and analyzed via enzyme-linked immunosorbent assay (ELISA). The collected data was compared to data collected from analytical reference standards at known concentrations. 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-0015	Aflatoxin B1, Aflatoxin B2, Aflatoxin G1, Aflatoxin G2, Ochratoxin A	Pass

Cannabinoid Profile [MCR-TM-0011] Analyst: SA/TM/VB *Test Date: 30 Sep 21*

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 - S21-59482 Gummy - Watermelon CL Classic 30mg GUM.30.CCWM.210920.1 MIP Cannabinoid Testing

Analyte	Cannabinoid	Conc. (mg/serving size)	Conc. (mg/g)	LOQ (mg/g)	LOD (mg/g)
CBDVA	Cannabidivarinic acid	ND	ND	0.1	0.01
CBDV	Cannabidivarin	ND	ND	0.1	0.02
CBDA	Cannabidiolic acid	ND	ND	0.1	0.02
CBGA	Cannabigerolic acid	ND	ND	0.1	0.02
CBG	Cannabigerol	0.54	0.17	0.1	0.04
CBD	Cannabidiol	ND	ND	0.1	0.03
THCV	Tetrahydrocannabivarin	ND	ND	0.1	0.01
THCVA	Tetrahydrocannabivarinic acid	ND	ND	0.1	0.03
CBCV	Cannabichromevarin	ND	ND	0.1	0.01
CBN	Cannabinol	0.26	0.08	0.1	0.01
CBNA	Cannabinolic acid	ND	ND	0.1	0.01
Δ9-THC	Δ9-Tetrahydrocannabinol	28.26	8.83	0.1	0.02
Δ8-THC	Δ8-Tetrahydrocannabinol	ND	ND	0.1	0.02
CBL	Cannabicyclol	ND	ND	0.1	0.02
THCA	Tetrahydrocannabinolic acid	ND	ND	0.1	0.01
CBC	Cannabichromene	0.29	0.09	0.1	0.01
CBCA	Cannabichromenic acid	ND	ND	0.5	0.05
CBLA	Cannabicyclolic acid	ND	ND	0.1	0.01
CBT	Cannabicitran	ND	ND	0.1	0.02

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: VF* *Test Date: 30 Sep - 03 Oct 21*

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

Table 2 - S21-59482 Gummy - Watermelon CL Classic 30mg GUM.30.CCWM.210920.1 MIP Microbiological Testing

Test ID	Test Analysis	Results	Unit	Limits	Disposition
21-59482-AC	Total Viable Aerobic Bacteria	<100	CFU/g	10^5 CFU/g	Pass
21-59482-YM	Total Yeast and Mold	<100	CFU/g	10^4 CFU/g	Pass
21-59482-CC	Total Coliforms	<100	CFU/g	10^3 CFU/g	Pass
21-59482-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: DGM* *Test Date: 03 Oct 21*

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

Table 3 - S21-59482 Gummy - Watermelon CL Classic 30mg GUM.30.CCWM.210920.1 MIP Pathogen Testing

Test ID	Test Analysis	Result	Units	Limits	Disposition
S21-59482-ECPT	*STEC*	Not Detected	N/A	Not Detected in 1g	Pass
S21-59482-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

Mycotoxin Screen [MCR-TM-0015] Analyst: VM/TC *Test Date: 01 Oct 21*

The sample was extracted using organic solvents and analyzed via enzyme-linked immunosorbent assay (ELISA). The collected data was compared to data collected from analytical reference standard at known concentrations.

Table 4 - S21-59482 Gummy - Watermelon CL Classic 30mg GUM.30.CCWM.210920.1 MIP Mycotoxin Testing

Test ID	Test Analysis	Result	LOD (ppb)	LOQ (ppb)	Limits (ppb)	Disposition
S21-59482-MY	*Mycotoxin*	Not Detected	10	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.

QA/QC

Cannabinoid Profile [MCR-TM-0011] *Analyst: YD/KM* *Test Date: 30 Sep 21*

The sample data for certified reference standards was collected at known concentrations of cannabinoids in solution.

QC-0.025 mg/mL 19 cannabinoid multi-component 9/7/2021

ID	Cannabinoid	Nominal Prep Conc (mg/mL)	Measured Conc. (mg/mL)	Recovery (%)
CBDVA	Cannabidivarinic acid	0.025	0.024	96%
CBDV	Cannabidivarin	0.025	0.025	98%
CBDA	Cannabidiolic acid	0.025	0.024	96%
CBGA	Cannabigerolic acid	0.025	0.024	96%
CBG	Cannabigerol	0.025	0.024	96%
CBD	Cannabidiol	0.025	0.024	96%
THCV	Tetrahydrocannabivarin	0.025	0.024	96%
THCVA	Tetrahydrocannabivarinic acid	0.025	0.024	96%
CBCV	Cannabichromevarin	0.025	0.024	96%
CBN	Cannabinol	0.025	0.025	98%
CBNA	Cannabinolic acid	0.025	0.025	98%
Δ9-THC	Δ9-Tetrahydrocannabinol	0.025	0.025	100%
Δ8-THC	Δ8-Tetrahydrocannabinol	0.025	0.025	100%
CBL	Cannabicyclol	0.025	0.025	100%
THCA	Tetrahydrocannabinolic acid	0.025	0.025	100%
CBC	Cannabichromene	0.025	0.025	100%
CBCA	Cannabichromenic acid	0.025	0.024	96%
CBLA	Cannabicyclolic acid	0.025	0.024	96%
CBT	Cannabicitran	0.025	0.025	100%

Criteria for successful analysis is QC recovery to be ≤20% above or below nominal.

Microbiological Screen [MCR-TM-0006] Analyst: TM/DGM/IM *Test Date: 08 Sep 21*

Quality control checks are performed to confirm that the equipment used for reading incubated microbiological cultures, which are done at various concentrations, are working correctly and that the fluorescence readings are accurate. QC checks are performed within 30 days of the recorded measurements.

Date of most recent QC check: Tempo2 QC 09/8/2021
Status: Pass

Pathogenic Bacterial Screen [MCR-TM-0012] ***Analyst: DGM*** *Test Date: 03 Oct 21*

Quality control checks are performed to validate the equipment used for reading incubated pathogenic bacterial cultures. QC checks are run with every analysis.

Date	QC Check	Pathogen	Result	Disposition
10/3/2021	Control (+)	*STEC*	Positive	Pass
10/3/2021	Control (-)	*STEC*	Negative	Pass
10/3/2021	Control (+)	*Salmonella*	Positive	Pass
10/3/2021	Control (-)	*Salmonella*	Negative	Pass

Mycotoxin Screen [MCR-TM-0015] ***Analyst: VM/TC*** *Test Date: 01 Oct 21*

Solutions were spiked with toxin reference materials at given concentrations and tested for toxin presence.

QC Sample	Result	Disposition
Negative Control	Negative	Pass
Positive Control	Positive	Pass

END OF REPORT