



Test report: Hemp G 0498-500

Client:	Sugarleaf Labs North Carolina
Client contact:	
Strain:	unknown
Sample Type:	MIP
Batch:	NA
Analyst:	GF/AL/PS
Authorization:	MK
Product ID:	S19-07228
Receipt Date:	3/7/2019
Test Date:	03/10/2019

Cannabinoid Profile per Serving

Serving Size		1 mL, 954mg
Cannabinoid	mg per serving	Weight %
THC	0.78mg	0.1%
CBD	17.95mg	1.9%
CBN	Not detected	Not detected
THCa	Not detected	Not detected
CBDa	Not detected	Not detected
Δ-8 THC	Not detected	Not detected
CBGa	Not detected	Not detected
THCv	Not detected	Not detected
CBDv	0.14mg	0.0%
CBC	0.82mg	0.1%
Total	19.69mg	2.1%
Max THC	0.78mg	0.1%
Max CBD	17.95mg	1.9%



Analytical Test Report

Client: Sugarleaf Labs North Carolina	Final Report MCR-S1904561 Rev.01.00 Report Date: 17 FEBRUARY 2019	Laboratory: MCR Labs 85 Speen St. Lower Level Framingham, MA 01701 508-872-6666
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Sample ID #	Sample Name	Batch	Matrix	Date Received	Date Tested	Sample Weight
MCR-S19-04561	Hemp Gen 2-11-19	N/A	Concentrate	12 February 2019	14-17 February 2019	N/A

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

Requested Testing:

Test	Code	Procedure	Analytes Tested
Microbiological Screen	MB	MCR-TM-0006	Bacterial (Total Aerobic, Total Coliform, Bile-Tolerant Gram Negative), Yeast and Mold, Pathogenic (E. coli, Salmonella)
Mycotoxin Screen	MY	MCR-TM-0013	Aflatoxin B1, Aflatoxin B2, Aflatoxin G1, Aflatoxin G2, Ochratoxin A
Heavy Metals Screen	HM	MCR-TM-0008	Arsenic (As), Cadmium (Cd), Lead (Pb), Mercury (Hg)
Volatile Organics Screen	VC	MCR-TM-0007	Ethanol, Propane, Isobutane, N-butane, Hexane
Pesticides Screen	PS	MCR-TM-0009	Bifenazate, Bifenthrin, Cyfluthrin, Etoxazole, Imazalil, Imidacloprid, Myclobutanil, Spiromesifen, Trifloxystrobin

Microbiological Screen [MCR-TM-0006] *Analyst: VB* *Test Date: 14-17 Feb 19*

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

Test ID	Test Analysis	Results	Unit	Limits
19-04561-AC	Total Viable Aerobic Bacteria	<100	CFU/g	10 ⁴ CFU/g
19-04561-YM	Total Yeast and Mold	<100	CFU/g	10 ³ CFU/g
19-04561-CC	Total Coliforms	<100	CFU/g	10 ² CFU/g
19-04561-EB	Total Bile-Tolerant Gram Negative Bacteria	<100	CFU/g	10 ² CFU/g

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-0006] *Analyst: AL* *Test Date: 17 Feb 19*

The sample was analyzed for pathogenic bacterial contamination via an automated Enzyme Linked Fluorescent Assay (ELFA).

Test ID	Test Analysis	Result	Units	Limits
19-04561-ECPT	<i>E. coli (O157)</i>	Negative	N/A	Not Detected in 1 g
19-04561-SPT	<i>Salmonella</i>	Negative	N/A	Not Detected in 1 g

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.

Mycotoxin Screen [MCR-TM-0013] *Analyst: JW* *Test Date: 14 Feb 19*

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.

Test ID	Test Analysis	Result	LOD (ppb)	Limits (ppb)
19-04561-MY	<i>Mycotoxin</i>	Negative	20	20

Note: ND = Not Detected; LOD = Limit of Detection; 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: WS/CD* *Test Date: 15 Feb 19*

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.

Test ID	Test Analysis	Result, ppb	LOD ppb	LOQ ppb	Limits ppb
19-04561-HM	Arsenic	ND	42.8	129.3	200
19-04561-HM	Cadmium	ND	37.1	112.2	200
19-04561-HM	Mercury	ND	27.5	83.3	100
19-04561-HM	Lead	BQL	23.1	70.2	500

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.

VC Screen [MCR-TM-0007] *Analyst: SA* *Test Date: 15 Feb 19*

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.

Test ID	Analyte	Result, ppm	LOD	LOQ	Limits, ppm
19-04561-VC	Propane	ND	12	40	12
19-04561-VC	Isobutane	ND	7	25	12
19-04561-VC	n-Butane	BQL	9	32	12
19-04561-VC	Ethanol	16100	376.5	1255	5000
19-04561-VC	Hexane	ND	1.8	6	290

Note: ND = Not Detected; LOD = Limit of Detection; LOQ = Limit of Quantitation; BQL = Below Quantitation Limit; ppm = part per million. 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 7. The uncertainty budget for ethanol is 0.15 ppm; propane is 0.12 ppm; isobutane is 0.11 ppm; n-Butane is 0.10 ppm.

Pesticides Screen [MCR-TM-0009] *Analyst: JW* *Test Date: 14 Feb 19*

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.

Test Analysis	Result, ppb	LOD ppb	LOQ ppb	Limits ppb
Bifenazate	ND	250	825	10
Bifenthrin	ND	160	528	10
Cyfluthrin	ND	3000	9900	10
Etoxazole	ND	60	198	10
Imazalil	ND	10	33	10
Imidacloprid	ND	10	33	10
Myclobutanil	ND	20	66	10
Spiromesifen	ND	100	330	10
Trifloxystrobin	ND	10	33	10

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.

END OF REPORT

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