

Comprehensive Analysis Report

Sample Overview

Client: Boojum Group, LLC

2206 W 3000 S Suite F Heber, UT
84032

Date Received: 06/02/2022

Sample Name: 300mg Muscle Gel

APRC #: BG220603A

Sample Matrix: Topical Applicant

Sample Lot: 300PC-003

Assay	Disposition	Date Tested
Heavy Metals - Utah State Cannabis Panel	Tested	06-27-2022
Microbial Impurities	Tested	06-24-2022
Pesticide Screen (APRC Panel)	Tested	06-24-2022
Residual Solvents	Tested	06-23-2022
Cannabinoid Testing (Potency)	Tested	06-03-2022



Instrument Analysis Report

Heavy Metals

Method: CTLA

Sample Name: 300mg Muscle Gel

APRC Lot Number: BG220603A

Analyte	Result (ppm)	LOD (ppm)	Threshold (ppm)	Pass/Fail
Arsenic	<0.001	0.001	2.00	Pass
Cadmium	0.001	0.001	0.82	Pass
Lead	0.001	0.001	1.20	Pass
Mercury	<0.001	0.001	0.40	Pass

Heavy metal analysis is completed in partnership with Contract Testing Laboratories of America, Orem UT.

Performed by: CTLA

Reviewed by: Jordan Morley

Instrument Analysis Report

Microbial Impurities

Method: 1-2034.01

Sample Name: 300mg Muscle Gel

APRC Lot Number: BG220603A

Total Counts			
Microbial Group:	Result (CFU/g):	Specification:	Disposition:
Total Aerobic Bacteria	<10	Report Only	Report Only
Total Yeast and Mold	<10	Report Only	Report Only

Specific Organism Identification			
Microbial Organism:	Result:	Specification:	Disposition:
Aspergillus flavus	ND	Report Only	Not Detected
Aspergillus fumigatus	ND	Report Only	Not Detected
Aspergillus niger	ND	Report Only	Not Detected
Aspergillus terreus	ND	Report Only	Not Detected
Escherichia coli - Non shigella	ND	Report Only	Not Detected
Escherichia coli - Shigella spp	ND	Report Only	Not Detected
Listeria monocytogenes	ND	Report Only	Not Detected
Salmonella - Specific Gene	ND	Report Only	Not Detected
Staphylococcus aureus	ND	Report Only	Not Detected
Pseudomonas aeruginosa	ND	Report Only	Not Detected

Performed by: Jordan Morley

Notes: Foreign Matter: Not Detected.

Reviewed by: Riley Hunter

Instrument Analysis Report

Pesticides

Method:

Sample Name: 300mg Muscle Gel

APRC Lot Number: BG220603A

Pesticide:	Finding	Action Limit (µg/g)	Pass/Fail
Abamectin	ND	0.5	Pass
Acephate	ND	0.4	Pass
Acequinocyl	ND	2.0	Pass
Acetamiprid	ND	0.2	Pass
Aldicarb	ND	0.4	Pass
Azoxystrobin	ND	0.2	Pass
Bifenazate	ND	0.2	Pass
Bifenthrin	ND	0.2	Pass
Boscalid	ND	0.4	Pass
Carbaryl	ND	0.2	Pass
Carbofuran	ND	0.2	Pass
Chlorantraniliprole	ND	0.2	Pass
Chlorfenapyr	ND	1.0	Pass
Chlorpyrifos	ND	0.2	Pass
Clofentezine	ND	0.2	Pass
Cyfluthrin	ND	1.0	Pass
Cypermethrin	ND	1.0	Pass
Daminozide	ND	1.0	Pass
Dichlorvos	ND	0.1	Pass
Diazinon	ND	0.2	Pass
Dimethoate	ND	0.2	Pass
Ethoprophos	ND	0.2	Pass
Etofenprox	ND	0.4	Pass
Etoxazole	ND	0.2	Pass
Fenoxycarb	ND	0.2	Pass
Fenpyroximate	ND	0.4	Pass
Fipronil	ND	0.4	Pass
Fonicamid	ND	1.0	Pass
Fludioxonil	ND	0.4	Pass

Pesticide:	Finding	Action Limit (µg/g)	Pass/Fail
Hexythiazon	ND	1.0	Pass
Imazal	ND	0.2	Pass
Imidacloprid	ND	0.4	Pass
Kresoxim-methyl	ND	0.4	Pass
Malathion A	ND	0.2	Pass
Metalaxyl	ND	0.2	Pass
Methiocarb	ND	0.2	Pass
Methomyl	ND	0.4	Pass
Methylparathion	ND	0.2	Pass
MGK-264	ND	0.2	Pass
Myclobutanil	ND	0.2	Pass
Naled	ND	0.5	Pass
Oxamyl	ND	1.0	Pass
Paclobutrazol	ND	0.4	Pass
Permethrins	ND	0.2	Pass
Phosmet	ND	0.2	Pass
Piperonylbutoxide	ND	2.0	Pass
Prallethrin	ND	0.2	Pass
Propiconazole	ND	0.4	Pass
Propoxur	ND	0.2	Pass
Pyrethrin	ND	1.0	Pass
Pyridaben	ND	0.2	Pass
Spinosad	ND	0.2	Pass
Spinetoram	ND	0.1	Pass
Spirotetramat	ND	0.2	Pass
Spiroxamine	ND	0.4	Pass
Tebuconazole	ND	0.4	Pass
Thiacloprid	ND	0.2	Pass
Thiamethoxam	ND	0.2	Pass
Trifloxystrobin	ND	0.2	Pass

Performed by: Noura Ahmed Reviewed by: Prabodh Satyal

Instrument Analysis Report

Residual Solvents

Method: 1-2027.02

Sample Name: 300mg Muscle Gel

APRC Lot Number: BG220603A

Residual Solvent	Finding (µg/g)	Action Level (µg/g)	Pass/Fail
Dimethyl sulfoxide	ND	5000	Pass
N,N-dimethylacetamide	ND	1090	Pass
1,2 Dimethoxyethane	ND	100	Pass
1,4 Dioxane	ND	380	Pass
1-Butanol	ND	5000	Pass
1-Pentanol	ND	5000	Pass
1-Propanol	ND	5000	Pass
2-Butanone	ND	5000	Pass
2-Butanol	ND	5000	Pass
2-Ethoxyethanol	ND	160	Pass
2-Methylbutane	ND	5000	Pass
2-Propanol	ND	5000	Pass
Acetone	ND	5000	Pass
Acetonitrile	ND	410	Pass
Benzene	ND	2	Pass
Butane	ND	5000	Pass
Cumene	ND	70	Pass
Cyclohexane	ND	3880	Pass
Dichloromethane	ND	600	Pass
2,2-Dimethylbutane	ND	290	Pass
2,3-Dimethylbutane	ND	290	Pass
m,p-Xylene	ND	See Total Xylenes	Pass
o-Xylene	ND	See Total Xylenes	Pass
Ethanol	3072.780	5000	Pass
Ethyl Acetate	ND	5000	Pass
Ethyl Benzene	ND	See Total Xylenes	Pass
Ethyl Ether	ND	5000	Pass
Ethylene Glycol	ND	620	Pass
Ethylene Oxide	ND	50	Pass

Residual Solvent	Finding (µg/g)	Action Level (µg/g)	Pass/Fail
Heptane	ND	5000	Pass
Hexane	ND	290	Pass
Isopropyl Acetate	ND	5000	Pass
Methanol	ND	3000	Pass
Methylpropane	ND	5000	Pass
2-Methylpentane	ND	290	Pass
3-Methylpentane	ND	290	Pass
N,N-Dimethylformamide	ND	880	Pass
Pentane	ND	5000	Pass
Propane	ND	5000	Pass
Pyridine	ND	100	Pass
Sulfolane	ND	160	Pass
Tetrahydrofuran	ND	720	Pass
Toluene	ND	890	Pass
Total Xylenes	ND	2170	Pass

† Per Utah state code 4-41a-701(3) Section R68-29-6

‡ Total Xylenes is a combination of the following: o-Xylene, m-Xylene, p-Xylene, and Ethylbenzene

Overall Disposition: **Pass**

Performed By: **Anil Rokaya**

Reviewed By: **Spencer Kipfmueller**

Instrument Analysis Report

Potency

Method: SOP 1-2026.01

Sample Name: 300mg Muscle Gel

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Cannabinoid	RT	Total %	Total mg/g
Cannabidivarin (CBDV)	ND	ND	ND
Cannabidiolic Acid (CBDA)	ND	ND	ND
Cannabigerolic Acid (CBGA)	ND	ND	ND
Cannabigerol (CBG)	ND	ND	ND
Cannabidiol (CBD)	3.35	0.99	9.88
Tetrahydrocannabivarin (THCV)	ND	ND	ND
Cannabinol (CBN)	ND	ND	ND
Δ 9-Tetrahydrocannabinol (Δ 9-THC)	6.23	0.06	0.59
Δ 8-Tetrahydrocannabinol (Δ 8-THC)	ND	ND	ND
Cannabichromene (CBC)	ND	ND	ND
Δ 9-Tetrahydrocannabinolic Acid (THCA-A)	ND	ND	ND

Performed by: Rakesh Satyal

Reviewed by: Jordan Morley

	%	mg/g
Total Cannabinoids	1.05	10.47
Total THC ^t	0.06	0.59
Total CBD ^s	0.99	9.88

^tTotal Thc is calculated by Δ 9-THC + (THCA-A*0.877)

^sTotal CBD is calculated by CBD + (CBDA*0.877)



Approved By:

William A. Deutschman, Ph.D.
 Laboratory Director - APRC Lehi
 06/27/2022