



# Comprehensive Analysis Report

## Sample Overview

**Client:** Farmer and Chemist

Sample Name: 1,000mg Balm

Date Received: 01/07/2022

Sample Matrix: Topical Applicant

APRC #: RMH220107B

Sample Lot: BL05EXP08.23





Aromatic Plant Research Center 230 N 1200 E STE 100 Lehi, UT 84043 www.aromaticplant.org





#### Instrument Analysis Report

## **Residual Solvents**

Method: 1-2027.02 Sample Name: 1,000mg Balm APRC Lot Number: RMH220107B

Residual Solvent	Finding (μg/g)	Action Level (μg/g)	Pass/Fai
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	ND	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: William Deutschman

Reviewed By: Jordan Morley

**Approved By:** Jordan Morley 01/12/2022

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Assay	Disposition	Date Tested	
Cannabinoid Testing	Tested	01-12-2022	



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#### Instrument Analysis Report

#### **Potency**

Method: SOP 1-2026.01 Sample Name: 1,000mg Balm APRC Lot Number: RMH220107B

Cannabinoid	RT	Total %	Total mg/g
Cannabidivarin	2.20	0.03	0.34
Cannabidiolic Acid	ND	ND	ND
Cannabigerolic Acid	ND	ND	ND
Cannabigerol	3.00	0.01	0.13
Cannabidiol	3.24	3.62	36.24
Tetrahydrocannabivarin	ND	ND	ND
Cannabinol	ND	ND	ND
Delta-9-Tetrahydrocannabinol	ND	ND	ND
Delta-8-Tetrahydrocannabinol	ND	ND	ND
Cannabichromene	ND	ND	ND
Tetrahydrocannabinolic acid	ND	ND	ND

Performed by: Jordan Morley

Reviewed by: Cierra Gunn

	%	mg/g
Total Cannabinoids	3.67	36.71
Total THC <sup>t</sup>	ND	ND
Total CBDs	3.62	36.24

 $^{
m t}$ Total Thc is calculated by  $\Delta 9$ -THC +(THCA-A\*0.877)

STotal CBD is calculated by CBD + (CBDA\*0.877)

**Approved By:** Cierra Gunn 01/13/2022

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# PCR-Microarray Analysis Report

# Microbial Certificate of Analysis

Client: Farmer and Chemist Date Received: 01/07/2022

Sample Name: 1,000mg Balm Date Tested: 01/10/2022 Sample Matrix: Topical Applicant APRC #: RMH220107B

Sample Lot: BL05EXP08.23

Total Counts			
Group	Result	Specification†	Disposition
Total Aerobic Bacteria	1,500	Report Only	Tested
Total Bile Tolerant Gram-Negative Bacteria	220	Report Only	Tested
Total Enterobacteria/Coliforms	220	Report Only	Tested
Total Yeast and Mold	19,000	Report Only	Tested

Specific Organism Identification			
Organism	Result	Specification†	Disposition
Aspergillus flavus	ND	Report Only	Tested
Aspergillus fumigatus	Detected	Report Only	Tested
Aspergillus niger	ND	Report Only	Tested
Aspergillus terreus	ND	Report Only	Tested
Escherichia coli – Non shigella	ND	Report Only	Tested
Escherichia coli – Shigella spp.‡	ND	Report Only	Tested
Listeria monocytogenes	ND	Report Only	Tested
Salmonella – Specific Gene	ND	Report Only	Tested
Staphylococcus aureus	ND	Report Only	Tested
Pseudomonas aeruginosa	ND	Report Only	Tested

T -	Per	Utah	State	R68-29-8	requirement	S

Analyzed by: J. Morley Notes:

Foreign Matter: ND

Reviewed by: C. Gunn

<sup>‡ -</sup> Interpretation is based on presence of Shigella specific genes along with positive findings of STX1 and STX2 genes.





### **Insight Report**

Printed at 1/12/2022 10:08:56 AM

#### 1,000mg Balm\_RMH220107B\_1112022\_1722 PM\_016

Sample ID: RMH220107B

Date acquired: 1/11/2022 9:43:54 PM

Acquired by: Admin

Data File: C:\LabSolutions\Data\1,000mg Balm\_RMH220107B\_1112022\_1722 PM\_016.lcd

Vial: 31 | Inj. Volume: 1.0000uL | Tray: 1

Name	Conc.	Unit	Comment 1	Comment 2
Abamectin B1a		ppm	0.5 ppm limit	LOQ = 0.0005 ppm
Acephate		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Acequinocyl		ppm	2 ppm limit	LOQ = 0.0005 ppm
Acetamiprid		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Aldicarb		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Azoxystrobin		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Bifenazate		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Bifenthrin		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Boscalid		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Carbaryl		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Carbofuran		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Chlorantraniliprole		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Chlorfenapyr		ppm	1 ppm limit	LOQ = 0.0005 ppm
Chlorpyrifos		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Clofentezine		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Cyfluthrin		ppm	1 ppm limit	LOQ = 0.005 ppm
Cypermethrin		ppm	1 ppm limit	LOQ = 0.0005 ppm
Daminozide		ppm	1 ppm limit	LOQ = 0.01 ppm
Diazinon		ppm	0.2 ppm limit	LOQ = 0.005 ppm
Dichlorvos (DDVP)		ppm	0.1 ppm limit	LOQ = 0.0025 ppm
Dimethoate		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Ethoprophos		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Etofenprox		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Etoxazole		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Fenoxycarb		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Fenpyroximate		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Fipronil			0.4 ppm limit	LOQ = 0.005 ppm
Flonicamid		ppm	1 ppm limit	LOQ = 0.0005 ppm
Fludioxonil		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Hexythiazox		ppm	1 ppm limit	
Imazalil		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Imidacloprid		ppm	0.4 ppm limit	LOQ = 0.0005 ppm LOQ = 0.0005 ppm
Kresoxim-methyl		ppm		· · ·
Malathion		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Metalaxyl		ppm	0.2 ppm limit	LOQ = 0.0005 ppm LOQ = 0.0005 ppm
Methiocarb		ppm	0.2 ppm limit 0.2 ppm limit	LOQ = 0.0005 ppm
Methomyl		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
MGK 264 (Pyrodone)		ppm	0.2 ppm limit	· · ·
Myclobutanil Naled		ppm		LOQ = 0.0005 ppm LOQ = 0.0005 ppm
		ppm	0.5 ppm limit	
Oxamyl Paclobutrazol		ppm	1 ppm limit	LOQ = 0.0005 ppm
		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Parathion Methyl Permethrins		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
		ppm	0.2 ppm limit 0.2 ppm limit	LOQ = 0.0005 ppm
Phosmet  Dispressed by the vide		ppm		LOQ = 0.0005 ppm
Piperonyl butoxide		ppm	2 ppm limit	LOQ = 0.0005 ppm
Prallethrin		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Propiconazole		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Propoxur Double in L		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Pyrethrin I		ppm	0.5 ppm limit	LOQ = 0.0005 ppm
Pyrethrin II		ppm	0.5 ppm limit	LOQ = 0.0005 ppm
Pyridaben Spirosod A		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Spinosad A		ppm	0.1 ppm limit	LOQ = 0.0005 ppm
Spinosad D		ppm	0.1 ppm limit	LOQ = 0.0005 ppm
Spiromesifen		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Spirotetramat		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Spiroxamine		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Tebuconazole		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Thiacloprid		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Thiamethoxam		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Trifloxystrobin		ppm	0.2 ppm limit	LOQ = 0.0005 ppm

Analyzed by: Dr. Noura Dosoky Reviewed by: Dr. Prabodh Satyal **Date:** 1/12/2022 **Date:** 1/12/2022

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Instrument Analysis Report





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**Heavy Metals** 

Method: CTLA Sample Name: 1,000mg Balm APRC Lot Number: RMH220107B

Analyte	Result (ppm)	LOD (ppm)	Threshold (ppm)	Pass/Fail
Arsenic	0.003	0.001	2.00	Pass
Cadmium	0.002	0.001	0.82	Pass
Lead	0.019	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: Cierra Gunn

**Approved By:** Cierra Gunn 01/12/2022

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