Aromatic Plant Research Center
230 N 1200 E STE 100
Lehi, UT 84043

385.484.8300
www.aromaticplant.org

F&C Lip Balm - Mint

Company Name:	Farmer and Chemist	Sample Received:	03/08/2021
Company Lot Number:	LS01 04/23	Release Date:	03/15/2021
Sample Matrix:	Topical Applicant	APRC Lot Number:	RMH210308A

Total THC	Total CBD	Cannabinoids
<LOQ %	0.28 %	0.30 %

Pesticides	Microbial	Residual Solvents	Heavy Metals	Terpene Analysis
Tested	Tested	Tested	Tested	Not Tested

Prepared By: Cierra Gunn

Reviewed By: Patty Ranaivo

Copyright © 2020 by Aromatic Plant Research Center (APRC). All rights reserved. The information contained in this document may not be used, published or redistributed, including online, without the prior written consent of APRC.

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

Residual Solvents Analysis Report

Certificate of Analysis

F&C Lip Balm - Mint

Company Name: Farmer and Chemist
Sample Received: 03-08-2021
Company Lot Number: LS01 04/23
APRC Lot Number: RMH210308A
Sample Matrix: Topical Applicant
Release Date: 03-11-2021

Analyte	Limit (µg/g)†	Concentration (µg/g)	Disposition
1,2 Dimethoxyethane	100	ND	Pass
1,4 Dioxane	380	ND	Pass
1-Butanol	5000	ND	Pass
1-Pentanol	5000	ND	Pass
1-Propanol	5000	ND	Pass
2-Butanol	5000	ND	Pass
2-Butanone	5000	ND	Pass
2-Ethoxyethanol	160	ND	Pass
2-methylbutane	5000	ND	Pass
2-Propanol (Isopropyl Alcohol)	5000	ND	Pass
Acetone	5000	ND	Pass
Acetonitrile	410	ND	Pass
Benzene	2	ND	Pass
Butane	5000	ND	Pass
Cumene	70	ND	Pass
Cyclohexane	3880	ND	Pass
Dichloromethane (Methylene Chloride)	600	ND	Pass
2,2-dimethylbutane	290	ND	Pass
2,3-dimethylbutane	290	ND	Pass
1,2-dimethylbenzene (*o*-Xylene)	See Xylenes	ND	Pass
1,3,4-dimethylbenzene (*m,p*-Xylene)	See Xylenes	ND	Pass
Dimethyl Sulfoxide (DMSO)	5000	ND	Pass
Ethanol	5000	ND	Pass

Copyright © 2020 by Aromatic Plant Research Center (APRC). All rights reserved. The information contained in this document may not be used, published or redistributed, including online, without the prior written consent of APRC.

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

Analyte	Limit (µg/g)†	Concentration (µg/g)	Disposition
Ethyl Acetate	5000	ND	Pass
Ethylbenzene	See Xylenes	ND	Pass
Ethyl ether	5000	ND	Pass
Ethylene glycol	620	ND	Pass
Ethylene Oxide	50	NT	N/A
Heptane	5000	ND	Pass
Hexane	290	ND	Pass
Isopropyl acetate	5000	ND	Pass
Methanol	3000	ND	Pass
Methylpropane	5000	NT	N/A
2-Methylpentane	290	NT	N/A
3-Methylpentane	290	NT	N/A
N,N-dimethylacetamide	1090	ND	Pass
N,N-dimethylformamide	880	ND	Pass
Pentane	5000	ND	Pass
Propane	5000	NT	N/A
Pyridine	100	ND	Pass
Sulfolane	160	ND	Pass
Tetrahydrofuran	720	ND	Pass
Toluene	890	ND	Pass
Xylenes‡	2170	ND	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

Prepared By: C. Wiscombe

Reviewed By: C. Gunn

Copyright © 2020 by Aromatic Plant Research Center (APRC). All rights reserved. The information contained in this document may not be used, published or redistributed, including online, without the prior written consent of APRC.

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

HPLC Analysis Report

Cannabinoid Profile Certificate of Analysis

Client: Farmer and Chemist
Sample Name: **F&C Lip Balm - Mint**
Sample Matrix: Topical Applicant
Sample Lot: **LS01 04/23**

Date Received: 03-08-2021
Date Tested: 03-09-2021
APRC #: RMH210308A

ID#	Cannabinoid	Ret. Time	Conc. (µg/mL)	% (w/w)	mg/g
1	Cannabidivarin (CBDV)	<LOQ	<LOQ	N/A	N/A
2	Cannabidiolic acid (CBDA)	<LOQ	<LOQ	N/A	N/A
3	Cannabigerolic acid (CBGA)	<LOQ	<LOQ	N/A	N/A
4	Cannabigerol (CBG)	2.919	3.331	0.02	0.19
5	Cannabidiol (CBD)	3.156	50.062	0.28	2.83
6	Tetrahydrocannabivarin (THCV)	<LOQ	<LOQ	N/A	N/A
7	Cannabinol (CBN)	<LOQ	<LOQ	N/A	N/A
8	Δ9-Tetrahydrocannabidinol (Δ9-THC)	<LOQ	<LOQ	N/A	N/A
9	Δ8-Tetrahydrocannabidinol (Δ8-THC)	<LOQ	<LOQ	N/A	N/A
10	Cannabichromene (CBC)	ND	ND	N/A	N/A
11	Δ9-Tetrahydrocannabidinolic acid (THCA-A)	ND	ND	N/A	N/A

	%	mg/g
Total Cannabinoids	0.30	3.02
Total THC†	<LOQ	<LOQ
Total CBD‡	0.28	2.83

Analyzed by: C. Wiscombe

Reviewed by: C. Gunn

*† Total THC is calculated by Δ9-THC +(THCA-A*0.877)*

*‡ Total CBD is calculated by CBD + (CBDA*0.877)*

Notes:

CERTIFIED BY AROMATIC PLANT RESEARCH CENTER

Copyright © 2020 by Aromatic Plant Research Center (APRC). All rights reserved.
The information contained in this document may not be used, published or redistributed, including online, without the prior written consent of APRC.

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

PCR-Microarray Analysis Report

Microbial Certificate of Analysis

Client:	Farmer and Chemist	Date Received:	03-08-2021
Sample Name:	**F&C Lip Balm - Mint**	Date Tested:	03-09-2021
Sample Matrix:	Topical Applicant	APRC #:	RMH210308A
Sample Lot:	**LS01 04/23**		

Total Counts			
Group	Result	Specification†	Disposition
Total Aerobic Bacteria	<100	≤100	Pass
Total Bile Tolerant Gram-Negative Bacteria	<100	Report Only	Tested
Total Enterobacteria/Coliforms	<100	Report Only	Tested
Total Yeast and Mold	<100	Report Only	Tested

Specific Organism Identification			
Organism	Result	Specification†	Disposition
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	ND	Pass
Pseudomonas Aeruginosa	ND	ND	Pass

† - Per Utah State R68-29-8 requirements

‡ - Interpretation is based on presence of *Shigella* specific genes along with positive findings of STX1 and STX2 genes.

Analyzed by: C. Wiscombe

Notes:

Reviewed by: C. Gunn

Copyright © 2020 by Aromatic Plant Research Center (APRC). All rights reserved.
The information contained in this document may not be used, published or redistributed, including online, without the prior written consent of APRC.

APRC® Aromatic Plant Research Center

Insight Report

FARMER & CHEMIST PREMIUM REGIMENS

Printed at 3/12/2021 5:09:36 PM

F&C Lip Balm_RMH210308A_3122021_902 AM_001

Sample ID: RMH210308A
Date acquired: 3/12/2021 11:58:35 AM
Acquired by: Admin
Data File: C:\LabSolutions\Data\F&C Lip Balm_RMH210308A_3122021_902 AM_001.lcd
Vial: 12 | 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	----	ppm	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	LOQ = 0.0005 ppm
Imazalil	----	ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Imidacloprid	----	ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Kresoxim-methyl	----	ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Malathion	----	ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Metalaxyl	----	ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Methiocarb	----	ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Methomyl	----	ppm	0.4 ppm limit	LOQ = 0.0005 ppm
MGK 264 (Pyrodone)	----	ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Myclobutanil	----	ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Naled	----	ppm	0.5 ppm limit	LOQ = 0.0005 ppm
Oxamyl	----	ppm	1 ppm limit	LOQ = 0.0005 ppm
Paclobutrazol	----	ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Parathion Methyl	----	ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Permethrins	----	ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Phosmet	----	ppm	0.2 ppm limit	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	----	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	----	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	0.0158	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

Comment:
Pass

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

ICP-MS Analysis Report

Heavy Metal Certificate of Analysis

Client: Farmer and Chemist
Sample Name: F&C Lip Balm - Mint
Sample Matrix: Topical Applicant
Sample Lot: LS01 04/23

Date Received: 03/08/2021
Date Released: 03/15/2021
APRC #: RMH210308A

Analyte	Conc. (ppm)	Specification† (ppm)	Disposition
Arsenic	<0.001	< 2.00	Pass
Cadmium	0.056	< 0.82	Pass
Mercury	0.001	< 0.40	Pass
Lead	0.003	< 1.20	Pass

Prepared by: Cierra Gunn

Reviewed by: Patty Ranaivo

† - Per Utah State Code 4-41a-701 (3) section R68-29-7

CERTIFIED BY APRC AROMATIC PLANT RESEARCH CENTER

Copyright © 2020 by Aromatic Plant Research Center (APRC). All rights reserved.
The information contained in this document may not be used, published or redistributed, including online, without the prior written consent of APRC.