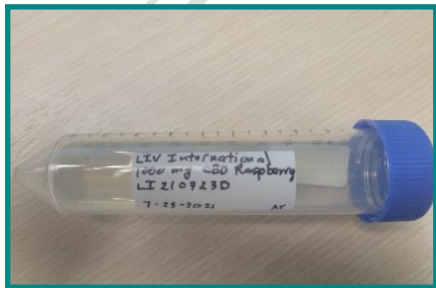


1000mg CBD Raspberry

Company Name: LIV International Sample Received: 07/26/2021
Company Lot Number: LI210723D Release Date: 07/30/2021
Sample Matrix: Tincture APRC Lot Number: EUF210726A



Total THC
0.12 %

Total CBD
3.35 %

Cannabinoids
4.33 %

Pesticides
Tested

Microbial
Tested

Residual
Solvents
Tested

Heavy Metals
Tested

Terpene
Analysis
Not Tested

Prepared By: Cierra Gunn

Reviewed By: Will Deutschman

Residual Solvents Analysis Report

Certificate of Analysis

1000mg CBD Raspberry

Client Name: LIV International

Client Lot #: LI210723D

Sample Matrix: Tincture

Sample Received: 07-26-2021

APRC Lot #: EUF210726A

Release Date: 07-27-2021

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	649.21	Pass
Ethyl Acetate	5000	110.78	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	ND	Pass
2-Methylpentane	290	ND	Pass
3-Methylpentane	290	ND	Pass
N,N-dimethylacetamide	1090	ND	Pass
N,N-dimethylformamide	880	ND	Pass
Pentane	5000	ND	Pass
Propane	5000	ND	Pass
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: Ambika Poudel

Reviewed By: Dr. Prabodh Satyal

HPLC Analysis Report

Cannabinoid Profile Certificate of Analysis

Client: LIV International
 Sample Name: 1000mg CBD Raspberry
 Sample Matrix: Tincture
 Sample Lot: LI210723D

Date Received: 07-26-2021
 Date Tested: 07-27-2021
 APRC #: EUF210726A

ID#	Cannabinoid	Ret. Time	Conc. (µg/mL)	% (w/w)	mg/g
1	Cannabidivarin (CBDV)	2.178	1.416	0.01	0.13
2	Cannabidiolic acid (CBDA)	<LOQ	<LOQ	N/A	N/A
3	Cannabigerolic acid (CBGA)	<LOQ	<LOQ	N/A	N/A
4	Cannabigerol (CBG)	3.065	54.631	0.51	5.13
5	Cannabidiol (CBD)	3.247	356.250	3.35	33.45
6	Tetrahydrocannabivarin (THCV)	<LOQ	<LOQ	N/A	N/A
7	Cannabinol (CBN)	<LOQ	<LOQ	N/A	N/A
8	Δ9-Tetrahydrocannabinol (Δ9-THC)	6.087	12.476	0.12	1.17
9	Δ8-Tetrahydrocannabinol (Δ8-THC)	<LOQ	<LOQ	N/A	N/A
10	Cannabichromene (CBC)	7.649	36.833	0.35	3.46
11	Δ9-Tetrahydrocannabinolic acid (THCA-A)	<LOQ	<LOQ	N/A	N/A

		%	mg/g
Analyzed by:	J. Morley	Total Cannabinoids	4.33
		Total THC [†]	0.12
Reviewed by:	C. Gunn	Total CBD [‡]	3.35
			43.34
			1.17
			33.45

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

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

Notes:

PCR-Microarray Analysis Report

Microbial Certificate of Analysis

Client: LIV International Date Received: 07-26-2021
 Sample Name: 1000mg CBD Raspberry Date Tested: 07-28-2021
 Sample Matrix: Tincture APRC #: EUF210726A
 Sample Lot: LI210723D

Total Counts			
Group	Result	Specification†	Disposition
Total Aerobic Bacteria	<100	Report Only	Tested
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
<i>Aspergillus flavus</i>	ND	ND	Tested
<i>Aspergillus fumigatus</i>	ND	ND	Tested
<i>Aspergillus niger</i>	ND	ND	Tested
<i>Aspergillus terreus</i>	ND	ND	Tested
<i>Escherichia coli</i> – Non shigella	ND	ND	Pass
<i>Escherichia coli</i> – <i>Shigella</i> spp.‡	ND	ND	Pass
<i>Listeria monocytogenes</i>	ND	ND	Tested
<i>Salmonella</i> – Specific Gene	ND	ND	Pass
<i>Staphylococcus aureus</i>	ND	ND	Tested
<i>Pseudomonas aeruginosa</i>	ND	ND	Tested

† - 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: J. Morley

Notes:

Reviewed by: C. Gunn

1000mg CBD Raspberry_LI210723D_EUF210726A_7292021_1440 PM_036

Sample ID: EUF210726A

Date acquired: 7/30/2021 1:56:29 AM

Acquired by: Admin

Data File: C:\LabSolutions\Data\1000mg CBD Raspberry_LI210723D_EUF210726A_7292021_1440 PM_036.lcd

Vial: 23 | 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	----	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

ICP-MS Analysis Report

Heavy Metal Certificate of Analysis

Client: LIV International Date Received: 07/26/2021
Sample Name: 1000mg CBD Raspberry Date Released: 07/29/2021
Sample Matrix: Tincture APRC #: EUF210726A
Sample Lot: LI210723D

Analyte	Conc. (ppm)	Specification [†] (ppm)	Disposition
Arsenic	<0.001	< 2.00	Pass
Cadmium	0.006	< 0.82	Pass
Mercury	<0.001	< 0.40	Pass
Lead	0.002	< 1.20	Pass

Prepared by: Cierra Gunn

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

Reviewed by: William Deutschman