

Certificate of Analysis

Cover Page

Twin Arbor Analytical

3990 Ruth Way Suite D
Paso Robles, CA 93446
(805) 369-2123



PREPARED FOR:

Cannabiva Medical
297 Kingsbury Grade - Suite 1183
Lake Tahoe, NV 89449

Report Date
Sample ID
Sample Type

7/7/2020
V14B
Broad Spectrum CBD Softgels

Results

Analysis

Cannabinoids	
Total CBD (mg/g)	44.15
Total THC	PASS

Pesticides and Mycotoxins	
Result	PASS

Residual Solvents	
Result	PASS

Heavy Metals	
Result	PASS

Microbial	
Result	PASS

Terpenes	
Page	NT

Note:
Updated Sample Type - 6/28/21 - SP

NT = Not Tested

Forrest Richmond
Laboratory Manager

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Cannabiva Medical
297 Kingsbury Grade - Suite 1183
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Report Date

7/7/2020

Sample ID

V14B

Sample Type

Broad Spectrum CBD Softgels

Internal Sample ID

200629-129-2

Lab Batch ID

200701-1

Date of Analysis

7/2/2020

Analysis: Cannabinoids

Instrumentation: HPLC/DAD

Instrument ID: HPLC 1

Method: TM0002 (Twin Arbor Analytical Proprietary)

	LOD / LOQ (mg/g)	mg/g	% by weight
CBD	0.17 / 0.5	49.2	4.92
CBDA	0.17 / 0.5	ND	ND
Total CBD *		49.2	4.92
Δ 9-THC	0.17 / 0.5	ND	ND
THCA	0.17 / 0.5	ND	ND
Total THC *		N/A	N/A
CBG	0.17 / 0.5	ND	ND
CBGA	0.17 / 0.5	ND	ND
Total CBG *		N/A	N/A
CBC	0.17 / 0.5	< LOQ	< LOQ
CBDV	0.17 / 0.5	ND	ND
CBN	0.17 / 0.5	ND	ND
Δ 8-THC	0.17 / 0.5	ND	ND
THCV	0.17 / 0.5	ND	ND
Total Tested Cannabinoids		49.2	4.92

% by weight

4.92, CBD

ND, CBDA

ND, Δ 9-THC

ND, THCA

ND, CBG

ND, CBGA

< LOQ, CBC

ND, CBDV

ND, CBN

ND, Δ 8-THC

ND, THCV

Moisture Content: **NT**

NOTE: Assuming 0.5 g per unit, total CBD equals 24.6 mg/unit

Revision: Updated "Prepared For" section & Sample Type - 7/28/21 - SP

ND = Not Detected

NT = Not Tested

* Totals account for decarboxylation of the acid and equal $XXX + (XXXX * 0.877)$

For example: Total THC = Δ 9-THC + (THCA * 0.877)

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Cannabiva Medical
297 Kingsbury Grade - Suite 1183
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Report Date

7/7/2020

Sample ID

V14B

Sample Type

Broad Spectrum CBD Softgels

Internal Sample ID

200629-129-2

Lab Batch ID

200703-1

Date of Analysis

7/3/2020

Analysis: Pesticides and Mycotoxins

Instrumentation: LC-Mass Spectrometer Instrument ID: LCMS 1 Method: TM0004 (Twin Arbor Analytical Proprietary)

Mycotoxins	Pass / Fail	Results (µg/g)	Action Limit (µg/g)	LOD / LOQ (µg/g)
Aflatoxin B1	Pass	ND	0.02	0.000 / 0.001
Aflatoxin B2	Pass	ND	0.02	0.001 / 0.004
Aflatoxin G1	Pass	ND	0.02	0.000 / 0.001
Aflatoxin G2	Pass	ND	0.02	0.001 / 0.004
Ochratoxin A	Pass	< LOQ	0.02	0.004 / 0.013

Category I	Pass / Fail	Results (µg/g)	Action Limit (µg/g)	LOD / LOQ (µg/g)
Aldicarb	Pass	ND	ND	0.035 / 0.105
Carbofuran	Pass	ND	ND	0.035 / 0.105
Chlordane	Pass	ND	ND	0.105 / 0.315
Chlorfenapyr	Pass	ND	ND	0.035 / 0.105
Chlorpyrifos	Pass	ND	ND	0.035 / 0.105
Coumaphos	Pass	ND	ND	0.035 / 0.105
Daminozide	Pass	ND	ND	0.035 / 0.105
DDVP (Dichlorvos)	Pass	ND	ND	0.035 / 0.105
Dimethoate	Pass	ND	ND	0.035 / 0.105
Ethoprop(hos)	Pass	ND	ND	0.035 / 0.105
Etofenprox	Pass	ND	ND	0.035 / 0.105
Fenoxycarb	Pass	ND	ND	0.035 / 0.105
Fipronil	Pass	ND	ND	0.035 / 0.105
Imazalil	Pass	ND	ND	0.035 / 0.105
Methiocarb	Pass	ND	ND	0.035 / 0.105
Methyl parathion	Pass	ND	ND	0.035 / 0.105
Mevinphos	Pass	ND	ND	0.018 / 0.053
Paclobutrazol	Pass	ND	ND	0.035 / 0.105
Propoxur	Pass	ND	ND	0.035 / 0.105
Spiroxamine	Pass	ND	ND	0.035 / 0.105
Thiacloprid	Pass	ND	ND	0.035 / 0.105

Continued on page 4

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Analysis: Pesticides and Mycotoxins (continued)

Instrumentation: LC-Mass Spectrometer

Instrument ID: LCMS 1

Method: TM0004 (Twin Arbor Analytical Proprietary)

Category II	Pass / Fail	Results (µg/g)	Action Limit (µg/g)	LOD / LOQ (µg/g)
Abamectin	Pass	ND	0.30	0.018 / 0.053
Acephate	Pass	ND	5.00	0.018 / 0.053
Acequinocyl	Pass	ND	4.00	0.018 / 0.053
Acetamiprid	Pass	ND	5.00	0.018 / 0.053
Azoxystrobin	Pass	ND	40.00	0.018 / 0.053
Bifenazate	Pass	ND	5.00	0.018 / 0.053
Bifenthrin	Pass	ND	0.50	0.018 / 0.053
Boscalid	Pass	ND	10.00	0.018 / 0.053
Captan	Pass	ND	5.00	0.035 / 0.105
Carbaryl	Pass	ND	0.50	0.018 / 0.053
Chlorantraniliprole	Pass	ND	40.00	0.018 / 0.053
Clofentezine	Pass	ND	0.50	0.018 / 0.053
Cyfluthrin	Pass	ND	1.00	0.035 / 0.105
Cypermethrin	Pass	ND	1.00	0.018 / 0.053
Diazinon	Pass	ND	0.20	0.018 / 0.053
Dimethomorph	Pass	ND	20.00	0.018 / 0.053
Etoazole	Pass	ND	1.50	0.018 / 0.053
Fenhexamid	Pass	ND	10.00	0.018 / 0.053
Fenpyroximate	Pass	ND	2.00	0.018 / 0.053
Fonicamid	Pass	ND	2.00	0.018 / 0.053
Fludioxonil	Pass	ND	30.00	0.018 / 0.053
Hexythiazox	Pass	ND	2.00	0.018 / 0.053
Imidacloprid	Pass	ND	3.00	0.018 / 0.053
Kresoxim-methyl	Pass	ND	1.00	0.018 / 0.053
Malathion	Pass	ND	5.00	0.018 / 0.053
Metalaxyl	Pass	ND	15.00	0.018 / 0.053
Methomyl	Pass	ND	0.10	0.018 / 0.053
Myclobutanil	Pass	ND	9.00	0.018 / 0.053
Naled	Pass	ND	0.50	0.018 / 0.053
Oxamyl	Pass	ND	0.20	0.018 / 0.053
Pentachloronitrobenzene	Pass	ND	0.20	0.018 / 0.053
Permethrin	Pass	ND	20.00	0.018 / 0.053
Phosmet	Pass	ND	0.20	0.018 / 0.053
Piperonylbutoxide	Pass	ND	8.00	0.018 / 0.053
Prallethrin	Pass	ND	0.40	0.018 / 0.053
Propiconazole	Pass	ND	20.00	0.018 / 0.053
Pyrethrins	Pass	ND	1.00	0.018 / 0.053
Pyridaben	Pass	ND	3.00	0.018 / 0.053
Spinetoram	Pass	ND	3.00	0.018 / 0.053
Spinosad	Pass	ND	3.00	0.018 / 0.053
Spiromesifen	Pass	ND	12.00	0.018 / 0.053
Spirotetramat	Pass	ND	13.00	0.018 / 0.053
Tebuconazole	Pass	ND	2.00	0.018 / 0.053
Thiamethoxam	Pass	ND	4.50	0.018 / 0.053
Trifloxystrobin	Pass	ND	30.00	0.018 / 0.053

LOD = Limit of Detection
 LOQ = Limit of Quantification
 ND = Not Detected
 NT = Not Tested

Notes:
 Updated "Prepared For" section - 12/11/2020 - SP
 Updated Sample Type - 6/28/21 - SP



Forrest Richmond
 Laboratory Manager

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Cannabiva Medical
297 Kingsbury Grade - Suite 1183
Lake Tahoe, NV 89449

Report Date 7/7/2020
Sample ID V14B
Sample Name Broad Spectrum CBD Softgels
Internal Sample ID 200629-129-2
Lab Batch ID 200707-1
Date of Analysis 7/7/2020

Analysis: Residual Solvents

Instrumentation: GC-MS Instrument ID: GCMS1 Method: TM0006 (Twin Arbor Analytical Proprietary)

	Pass / Fail	Results (µg/g)	Action Limit (µg/g)	LOQ (µg/g)
1,2-Dichloroethane	PASS	< LOQ	1.0	0.02
Benzene	PASS	< LOQ	1.0	0.01
Chloroform	PASS	< LOQ	1.0	0.02
Ethylene oxide	PASS	< LOQ	1.0	0.23
Methylene chloride	PASS	< LOQ	1.0	0.55
Trichloroethylene	PASS	< LOQ	1.0	0.11
Acetone	PASS	< LOQ	5000	16.53
Acetonitrile	PASS	< LOQ	410	1.32
Butane	PASS	< LOQ	5000	36.73
Ethanol	PASS	< LOQ	5000	22.04
Ethyl acetate	PASS	< LOQ	5000	8.82
Ethyl ether	PASS	< LOQ	5000	2.2
Heptane	PASS	< LOQ	5000	11.02
Hexane	PASS	< LOQ	290	0.55
Isopropyl alcohol	PASS	< LOQ	5000	20.66
Methanol	PASS	< LOQ	3000	10.33
Pentane	PASS	< LOQ	5000	16.53
Propane	PASS	< LOQ	5000	7.65
Toluene	PASS	< LOQ	890	1.65
Total xylenes (ortho-, meta-, para-)	PASS	< LOQ	2170	6.61

NOTE:

Updated Sample Type - 6/28/21 - SP



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Laboratory Manager

ND = Not Detected NT = Not Tested

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Report Date 7/7/2020
Sample ID V14B
Sample Type Broad Spectrum CBD Softgels
Internal Sample ID 200629-129-2
Lab Batch ID 200703-1
Date of Analysis 7/3/2020

Analysis: Heavy Metals

Instrumentation: ICP-MS Instrument ID: ICPMS1 Method: TM0005 (Twin Arbor Analytical Proprietary)

	Pass / Fail	Results (µg/g)	Action Limit (µg/g)	LOQ (µg/g)
Arsenic	PASS	< LOQ	0.2	0.1
Cadmium	PASS	< LOQ	0.2	0.05
Lead	PASS	< LOQ	0.5	0.05
Mercury	PASS	< LOQ	0.1	0.05

NOTE:

Reports were combined and adjusted for the client. ND was changed to < LOQ and reference to ND was removed. Compounds that were not tested were removed. Action Limits and Pass/Fail were added for all tests.
- 2/18/2020 - CG

Updated "Prepared For" section - 12/11/2020 - SP

Updated Sample Type - 6/28/21 - SP



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297 Kingsbury Grade - Suite 1183
Lake Tahoe, NV 89449

Report Date 7/7/2020
Sample ID V14B
Sample Type Broad Spectrum CBD Softgels
Internal Sample ID 200629-129-2
Lab Batch ID 200701-1
Date of Analysis 7/4/2020

Analysis: Microbial Impurities

Instrumentation: RT-PCR Instrument ID: BAX1 Method: AOAC-RI 091301 (modified)

	Action Limit	Pass / Fail
STEC (Shiga-toxicogenic E. coli)	ND	PASS
Salmonella sp.	ND	PASS
Pathogenic Aspergillus	ND	NT

NOTE:
Updated "Prepared For" section - 12/11/2020 - SP
Updated Sample Type - 6/28/21 - SP

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