



# BANNED SUBSTANCES CONTROL GROUP

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## BSCG BATCH CERTIFICATION CERTIFIED CBD

### REPORTING ADDRESS:

fourfive CBD  
Fountain Court, 2 Victoria Square  
St Albans, Hertfordshire  
United Kingdom, AL1 3TF

**REPORT DATE:** May 7, 2019

**RECEIVE DATE:** April 16, 2019

**BRAND NAME:** fourfive CBD

**PRODUCT NAME:** fourfive CBD (Unflavored)

**BATCH #:** FFTF01

**LAB ID #:** 19D0308 / 262347 / 1904175

**PRODUCT TYPE:** Finished Product

### CANNABINOID PROFILE TESTING

**METHOD:** Quantitative Analysis of Cannabinoids by High Performance Liquid Chromatography with UltraViolet Detector (HPLC-UV) in Accordance with ISO/IEC 17025:2005 Validated Standard Operating Procedure.

Density of Product (1.0 g/ml - water, 0.925 g/ml - oil, 0.945 g/ml - MCT oil) 0.945  
Serving Size on Package (ml) 1  
Package Size (ml) 30  
Maxium Servings Per Day (ml) 6

Analyte	RESULTS		CALCULATED VALUES			PERCENT	
	mg/kg *	RL	mg/g	mg/serving	mg/package	%	Pass/Fail
Cannabidiol (CBD)	37200	488	35.15	35.15	1054.62	3.72	
Cannabidiolic Acid (CBDA)	0	48.8	0.00	0.00	0.00	0.00	
Cannabigerol (CBG)	0	48.8	0.00	0.00	0.00	0.00	
Cannabinol (CBN)	0	48.8	0.00	0.00	0.00	0.00	
Delta 9-Tetrahydrocannabinol (D9-THC)	0	48.8	0.00	0.00	0.00	0.00	
Delta 8-Tetrahydrocannabinol (D8-THC)	0	48.8	0.00	0.00	0.00	0.00	
Cannabichromene (CBC)	0	48.8	0.00	0.00	0.00	0.00	
Tetrahydrocannabinolic acid (THCA)	0	48.8	0.00	0.00	0.00	0.00	
<b>Total Cannabinoids</b>	<b>37200</b>		<b>35.15</b>	<b>35.15</b>	<b>1054.62</b>	<b>3.72</b>	
<b>Max THC (THC + 0.877*THCA)</b>			<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>Pass</b>
<b>Max CBD (CBD + 0.877*CBDA)</b>			<b>35.15</b>	<b>35.15</b>	<b>1054.62</b>	<b>3.72</b>	<b>Pass</b>
<b>Other Cannabinoids</b>			<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	

### Notes:

Max THC must be <0.3% to Pass

Max CBD must be <90% to Pass

RL - Reporting Limit

\* Zero indicates the analyte was not detected subject to the RL.

Max THC and Max CBD are calculated values based on the weight loss of the acid group assuming complete decarboxylation of the acid to the neutral form

The sample is a watery in composition and clear of color and odor.

### CONTAMINANTS - SOLVENTS

**METHOD:** Residual Solvents by Head Space Gas Chromatography Flame Ionization Detection Mass Spectrometry (HS GC FID/MS) in Accordance with ISO/IEC 17025:2005 Validated Standard Operating Procedure.

### RESULTS:

Solvent	Category	Result	RL (ppm)	Action Level (ppm)	Pass/Fail
1,2-Dichloroethane	I	ND	<1	Present	Pass
Benzene	I	ND	<1	Present	Pass
Chloroform	I	ND	<1	Present	Pass
Ethylene oxide	I	ND	<1	Present	Pass
Methylene chloride	I	ND	<1	Present	Pass
Trichloroethene	I	ND	<1	Present	Pass
Acetone	II	ND	<1	5000	Pass
Acetonitrile	II	ND	<1	410	Pass
Butane	II	ND	<1	5000	Pass
Diethyl ether	II	ND	<1	5000	Pass
Ethanol	II	ND	<1	5000	Pass
Ethyl acetate	II	ND	<1	5000	Pass
Heptane	II	ND	<1	5000	Pass
Hexane	II	ND	<1	290	Pass
Isopropanol	II	ND	<1	5000	Pass
Methanol	II	ND	<1	3000	Pass
Pentane	II	ND	<1	5000	Pass
Propane	II	ND	<1	5000	Pass
Toluene	II	ND	<1	890	Pass
Total xylenes (ortho-, meta-, para-)	II	ND	<1	2170	Pass

### Notes:

ND - Not Detected

RL - Reporting Limit

California Bureau of Cannabis Control Emergency Regulation Text Solvent List and Action Level Used

Pass/Fail based on Action Level



**CONTAMINANTS - PESTICIDES**

**METHOD:**

USP 40 <561>, sample meets European Pharmacopeial Pesticides Residual limits for all compounds.  
No Quintozene residues detected.

**RESULTS (Pass/Fail based on Limit):**

Compound	Limit (PPM)	Result
Acephate	0.1	Pass
Alachlor	0.05	Pass
Aldrin and dieldrin	0.05	Pass
Azinphos-ethyl	0.1	Pass
Azinphos-methyl	1	Pass
Bromine, inorganic	50	Pass
Bromophos-ethyl	0.05	Pass
Bromophos-methyl	0.05	Pass
Bromopropylate	3	Pass
Chlordane	0.05	Pass
Chlorfenvinphos	0.5	Pass
Chlorpyrifos-ethyl	0.2	Pass
Chlorpyrifos-methyl	0.1	Pass
Chlorthal-dimethyl	0.01	Pass
Cyfluthrin (sum of)	0.1	Pass
gamma-Cyhalothrin	1	Pass
Cypermethrin	1	Pass
DDT (sum of o,p'-DDE, p,p'-DDE, o,p'-DDT, p,p'-DDT, o,p'-DDD, and p,p'-DDD)	1	Pass
Deltamethrin	0.5	Pass
Diazinon	0.5	Pass
Dichlofluanid	0.1	Pass
Dichlorvos	1	Pass
Dicofol	0.5	Pass
Dimethoate and omethoate	0.1	Pass
Dithiocarbamate (as CS2)	2	Pass
Endosulfan (includes endosulfan I, II, sulfate)	3	Pass
Endrin	0.05	Pass
Ethion	2	Pass
Etrimphos	0.05	Pass
Fenchlorphos (sum of fenchlorophos and fenchlorophos-oxon)	0.1	Pass
Fenitrothion	0.1	Pass
Fenpropathrin	0.03	Pass
Fensulfathion	0.05	Pass
Fenthion	0.05	Pass
Fenvalerate	1.5	Pass
Flucytrinate	0.05	Pass

Compound	Limit (PPM)	Result
t-Fluvalinate	0.05	Pass
Fonofos	0.05	Pass
Heptachlor	0.05	Pass
Heptachlor Epoxide	0.05	Pass
Hexachlorobenzene	0.1	Pass
Hexachlorocyclohexane	0.3	Pass
Lindane	0.6	Pass
Malathion and malaoxon	1	Pass
Mecarban	0.05	Pass
Methacriphos	0.05	Pass
Methamidophos	0.05	Pass
Methidathion	0.2	Pass
Methoxychlor	0.05	Pass
Mirex	0.01	Pass
Monocrotophos	0.1	Pass
Parathion-ethyl and Paraoxon-ethyl	0.5	Pass
Parathion-methyl and Paraoxon-methyl	0.2	Pass
Pencimethalin	0.1	Pass
Pentachloranisol	0.01	Pass
Permethrin and isomers	1	Pass
Phosalone	0.1	Pass
Phosmet	0.05	Pass
Piperonyl butoxide	3	Pass
Pirimiphos-ethyl	0.05	Pass
Pirimiphos-methyl	4	Pass
Procymidone	0.1	Pass
Profenophos	0.1	Pass
Prothiophos	0.05	Pass
Pyrethrins	3	Pass
Quinalphos	0.05	Pass
Quintozene (PCNB) (includes alpha-BHC, beta-BHC, delta-BHC)	1	Pass
S-421	0.02	Pass
Tecnazene	0.05	Pass
Tetradifon	0.3	Pass
Vinclozolin	0.4	Pass

**CONTAMINANTS - MICROBIOLOGICAL AGENTS**

**METHOD:**

USP <2021>, USP <2022>

**RESULTS (cfu/g, ND, or Absent/Present):**

**LIMITS - Finished Products/Ingredients, Botanical Extract**

Test	Result	USP	ANSI 173	AHPA	CBCC
Total Plate Count	<10	1 x 10 <sup>4</sup>	1 x 10 <sup>4</sup>	1 x 10 <sup>4</sup>	N/A
Yeast and Mold	<10	1 x 10 <sup>3</sup>	1 x 10 <sup>3</sup>	1 x 10 <sup>3</sup>	N/A
Total Coliforms	<10	N/A	1 x 10 <sup>2 a</sup>	1 x 10 <sup>2</sup>	N/A
E. Coli	ND	Absent	ND	ND	ND
Salmonella species	ND	Absent	ND	ND	ND
Staphylococcus aureus	ND	N/A	ND	N/A	N/A
Pseudomonas aeruginosa	ND	N/A	N/A	N/A	N/A
	Pass/Fail	Pass	Pass	Pass	Pass

**Notes:**

ND - Not Detected

N/A - Not Applicable

California Bureau of Cannabis Control (CBCC) Emergency Regulation Text

USP 40-NF 35 <2023> - Microbiological Attributes of Nonsterile Nutritional and Dietary Supplements - May 1, 2017

ANSI 173 - 2013 ( a - ANSI 173 limits reference enterbacteriaceae as opposed to total coliforms)

AHPA Guidance Policies - Rev. 07/03/17



**CONTAMINANTS - HEAVY METALS**

**METHOD:** Quantitative Analysis of Heavy Metals by Inductively Coupled Plasma Mass Spectrometry (ICP-MS) for Arsenic, Cadmium, Lead, Mercury, Chromium

METAL	RESULT	ACCEPTABLE LEVELS: (µg/day)				
		ICH Q3D	USP	Health Canada	ANSI 173	AHPA
Arsenic	0.072	15	15	10	10	10
Cadmium	0.012	5	5	6	4.1	4.1
Mercury	0.012	30	15 (2 as Hg)	20	2	2
Lead	0.114	5	5	10	10	6
Chromium	0.480	11000	N/A	N/A	20 <sup>a</sup>	N/A
	Pass/Fail	Pass	Pass	Pass	Pass	Pass

**Notes:**  
*ICH Q3D - Guideline for Elemental Impurities - September 2015*  
*USP 40-NF 35 <232> - Elemental Contaminants in Dietary Supplements - May 1, 2017*  
*Quality of Natural Health Products Guide - Natural and Non-prescription Health Products Directorate - Health Canada - May 1, 2015*  
*ANSI 173 - 2013 ( <sup>a</sup> - ANSI 173 limits reference chromium (VI) as opposed to total chromium)*  
*AHPA Guidance Policies - Rev. 07/03/17*

**BANNED SUBSTANCE TESTING**

**METHOD:** Samples of the item were extracted and analyzed according to in-house methods for nutritional supplements by qualitative instrumental screen using ultra-high-performance liquid chromatography / high-resolution mass spectrometry (UHPLC/HRMS). Method detection levels, which vary based on compound and matrix analyzed, are estimated to be in the 2-500 ng/g range for most compounds in most items.

**TESTING MENU:** The testing menu covers 475 compounds including WADA Prohibited Substances and other prescription, over-the-counter, and illicit drugs not banned in sport. Details are available at <https://www.bscg.org/certified-drug-free-testing-menu-wada-prohibited-list-and-more/>.

**RESULTS:** No compounds from the testing menu were detected in the item.

Please contact [info@bscg.org](mailto:info@bscg.org) with any concerns or questions.

Sincerely,

Oliver Catlin  
President

*Disclaimer: Cannabinoids are prohibited substances in sport with the exception of Cannabidiol (CBD) under World Anti-Doping Agency Prohibited List language. Results apply only to the sample(s) tested. BSCG makes no claims or representations about the item(s) and does not endorse, make statements about the efficacy or safety, or make any other assurances regarding the item(s) including as to the absence of banned substances in sport or any other analytes not included in testing.*