

# RESILIENCE

## CERTIFICATE OF ANALYSIS

PRODUCT NAME: 25mg CBD Soft Gels

PRODUCT CODE: GC-NC-25-A

LOT NUMBER: GC2520-03

DATE OF MANUFACTURE: 21JUL2020  
(DDMMYYYY)

EXPIRATION DATE: 21JAN2022

(Expiration date is 18 months  
under sealed & undisturbed.)

### INGREDIENTS:

Composition of Fill: Polyisobutyl 80, Polyisobutyl 20, Fractionated Coconut Oil, Broad Spectrum  
CBD Oil (0.0% THC),  $\beta$ -Caryophyllene

Composition of the Shell: Hydroxy-derived Gelatin, Glycerin, Water, Artificial Coloring

Parameter	Method <sup>1</sup>	Specification	Results
Appearance		Oval soft gelatin capsule	Pass
Color	QCU002	Dark Amber	Pass
Cannabinoids		LOQ (ppm)	Wt. (%) (mg/g)
CBD		20	3.83 38.33
CBD-A		20	< LOQ < LOQ
$\Delta^9$ -THC		5	< LOQ < LOQ
THC-A		5	< LOQ < LOQ
CBN		5	< LOQ < LOQ
CBN-A		5	< LOQ < LOQ
CBG		5	< LOQ < LOQ
CBC	QCU001 (UHPLC- DAD)	5	< LOQ < LOQ
CBC-A		5	< LOQ < LOQ
$\Delta^8$ -THC		5	< LOQ < LOQ
CBDV		5	0.06 0.64
CBDV-A		5	< LOQ < LOQ
THCV		5	< LOQ < LOQ
Potency - Total CBD		90 - 110% of Labelled Claim for CBD	98% of Labelled Claim for CBD (24.5 mg per soft gel)
Total THC		0.0%	0.0%
Identity - CBD		Retention Time $\pm$ 0.05min of Standard	0.03 min
Terpenes <sup>2</sup>	GC/FID & LC/MS	Refer to Oil Specification	Refer to Oil Specification
Pesticides <sup>2</sup>	LC/MS & GC/MS	Refer to Oil Specification	Refer to Oil Specification
Residual Solvents <sup>2</sup>	USP <467>	Refer to Oil Specification	Refer to Oil Specification
Elemental Impurities <sup>2</sup>	USP <2312>	Refer to Oil Specification	Refer to Oil Specification
Microbial Limits <sup>2</sup>	USP <2012>	Refer to Oil Specification	Refer to Oil Specification

Notes: <sup>1</sup> according to United States Pharmacopoeia general analytical methods, <sup>2</sup> United States Pharmacopoeia <sup>3</sup> party contract laboratory method <sup>4</sup> 1-mg processed as bulk oil  
LOQ: Limit of Detection, LQ: Limit of Quantitation, LUP: Limit of Purity

Analyst: CJS

Test Date: 8/27/2020

**E4: Elemental Analysis (WI-10-13)**

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

86008-E4		Conc. <sup>1</sup> (µg/kg)	RL (µg/kg)	Limits <sup>2</sup> (µg/kg)	Status
Symbol	Metal				
Al	Aluminum	884	50	-	PASS
As	Arsenic	ND	50	200	PASS
Cd	Cadmium	ND	50	200	
Ca	Calcium	1,750	500	-	PASS
Cr	Chromium	ND	50	300	PASS
Co	Cobalt	ND	50	100	PASS
Cu	Copper	326	50	3,000	
Fe	Iron	544	50	-	PASS
Pb	Lead	ND	50	500	
Mg	Magnesium	1,850	50	-	
Mn	Manganese	ND	50	-	PASS
Hg	Mercury	ND	50	100	PASS
Mo	Molybdenum	ND	50	1,000	
Ni	Nickel	ND	50	500	PASS
P	Phosphorus	53,700	500	-	
K	Potassium	30,000	50	-	
Se	Selenium	ND	50	700	PASS
Ag	Silver	ND	500	-	
S	Sulfur	ND	500	6,000	PASS
Sr	Tin	ND	500	-	
Zn	Zinc	168	50	-	

1) ND - None detected to the Method Detection Limit (MDL)

2) USP recommended maximum daily limits for inhalational drug product

**MB1: Microbiological Contaminants [WT-10-09]**

Analyst: MM

Test Date: 8/26/2020

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

**86008-MB1**

Symbol	Analysis	Results	Units	Limits*	Status
AC	Total Aerobic Bacterial Count	<100	CFU/g	100,000 CFU/g	PASS
CC	Total Coliform Bacterial Count	<100	CFU/g	1,000 CFU/g	PASS
EB	Total Bile Tolerant Gram Negative Count	<100	CFU/g	1,000 CFU/g	PASS
YM	Total Yeast & Mold	<100	CFU/g	10,000 CFU/g	PASS

Recommended limits established by the American Herbal Pharmacopoeia (AHP) monograph for Cannabis Inflorescence [2013], for consumable botanical products, including processed and unprocessed cannabis materials, and solvent-based extracts. Note: All recorded Microbiological tests are within the established limits.

**MB2: Pathogenic Bacterial Contaminants [WT-10-10]**

Analyst: MM

Test Date: 8/27/2020

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

**86008-MB2**

Test ID	Analysis	Results	Units	Limits*	Status
86008-ECPT	E. coli (O157)	Negative	NA	Non Detected	PASS
86008-SPT	Salmonella	Negative	NA	Non Detected	PASS

Note: All recorded pathogenic bacteria tests passed.

**MY: Mycotoxin Testing [WT-10-05]**

Analyst: AEG

Test Date: 9/2/2020

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

**86008-MY**

Test ID	Date	Results	MDL	Limits	Status*
Total Aflatoxin	9/2/2020	< MDL	2 ppb	< 20 ppb	PASS
Total Ochratoxin	9/2/2020	< MDL	3 ppb	< 20 ppb	PASS

**PST: Pesticide Analysis [WI-10-11]**

Analyst: CJR

Test Date: 9/3/2020

The client sample was analyzed for pesticides using Liquid Chromatography with Mass Spectrometric detection (LC/MS/MS). The method used for sample prep was based on the European method for pesticide analysis (EN 15662).

**86008-PST**

Analyte	CAS	Result	Units	LLD	Limits (ppb)	Status
Ahamectin	71751-41-2	ND	ppb	0.20	300	PASS
Spinosad	168316-95-8	ND	ppb	0.10	3000	PASS
Pyrethrin	8003-34-7	ND	ppb	0.10	1000	PASS
Trifloxystrobin	141517-21-7	ND	ppb	0.10	30000	PASS
Spirotetramat	203313-25-1	ND	ppb	0.10	13000	PASS
Spiromesifen	283594-90-1	ND	ppb	0.10	12000	*
Piperonyl butoxide	51-03-6	ND	ppb	0.10	8000	PASS
Paclobutrazol	76738-62-0	ND	ppb	0.10	10	PASS
Myclobutanil	88671-89-0	ND	ppb	0.10	9000	PASS
Imidacloprid	138261-41-3	ND	ppb	0.10	3000	PASS
Imazalil	35554-44-0	ND	ppb	0.10	10	PASS
Fenoxycarb	72490-01-8	ND	ppb	0.10	10	PASS
Etoazole	153233-91-1	ND	ppb	0.10	1500	PASS
Dichlorvos	62-73-7	ND	ppb	3.00	10	PASS
Cyfluthrin	68359-37-5	ND	ppb	0.50	1000	PASS
Bifenthrin	82657-04-3	ND	ppb	0.20	500	PASS
Bifenazate	149877-41-8	ND	ppb	0.10	5000	PASS
Azoxystrobin	131860-33-8	ND	ppb	0.10	40000	PASS

\* Testing limits for ingestion established by the State of California: CCR, Title 16, Division 42, Chapter 5, Section 5713. ND indicates "none detected" above the lower limit of detection (LLD). Analytes marked with (\*) indicate analytes for which no recovery was observed for a pre-spiked matrix sample.



## TP: Terpenes Profile [WI-10-27]

Analyst: CA

Test Date: 9/1/2020

Client sample analysis was performed using full evaporative technique (FET) headspace sample delivery and gas chromatographic (GC) compound separation. A combination of flame ionization detection (FID) and/or mass spectrometric (MS) detection with mass spectral confirmation against the National Institute of Standards and Technology (NIST) Mass Spectral Database, Revision 2017 were used. Chromatographic and/or mass spectral data were processed by quantitatively comparing the analytical peak areas against calibration curves prepared from certified reference standards.

## 86008-TP

Compound	CAS	Conc. (wt%)	Conc. (ppm)	Qualitative Profile
alpha-pinene	80-56-8	<RL	<RL	
camphene	79-02-5	<RL	<RL	
sabinene*	3387-41-5	ND	ND	
beta-myrcene	123-35-3	<RL	<RL	
beta-pinene	127-91-3	<RL	<RL	
alpha-phellandrene	99-83-2	ND	ND	
delta-3-carene	13466-78-9	ND	ND	
alpha-terpinene	99-86-5	ND	ND	
alpha-ocimene	502-99-8	<RL	<RL	
D-limonene	138-86-3	<RL	<RL	
p-cymene	99-87-6	<RL	<RL	
cis-beta-ocimene	3338-55-4	ND	ND	
eucalyptol	470-82-6	<RL	<RL	
gamma-terpinene	99-85-4	ND	ND	
terpinolene	586-62-9	ND	ND	
linalool	78-70-6	0.0062	61.6	
L-fenchone*	7787-20-4	ND	ND	
isopulegol	89-79-2	ND	ND	
menthol*	89-78-1	ND	ND	
peranol	106-24-1	ND	ND	
beta-caryophyllene	87-44-5	1.36	13,600	
alpha-humulene	6753-98-6	0.0625	625	
cis-nerolidol	3790-78-1	ND	ND	
trans-nerolidol	40716-66-3	ND	ND	
pinol	489-86-1	0.0063	62.8	
caryophyllene oxide	1139-30-6	0.0082	82.4	
alpha-bisabolol	23089-26-1	<RL	<RL	

Total Terpene: 1.4 wt%

\* Certified reference standard not available for this compound. Concentration is estimated using the response factor from alpha-pinene. ND = None Detected. RL = Reporting Limit of 5 ppm.

## FC: Analysis of Volatile Organic Compounds [WT-10-28]

Analyst: CA

Test Date: 8/31/2020

The client sample was analyzed by Head-Space Gas Chromatography (HS-GC). The collected data was compared to data collected for certified reference standards at known concentrations.

## 86008-FC

Compound	CAS	Amount <sup>1</sup>	Limit <sup>2</sup>	RL	Status
Propane	74-98-6	ND	1,000 ppm	100	PASS
Isobutane	75-28-5	ND	1,000 ppm	100	PASS
Butane	106-97-8	ND	1,000 ppm	100	PASS
Methanol	67-56-1	ND	3,000 ppm	100	PASS
Pentane	109-66-0	ND	5,000 ppm	100	PASS
Ethanol	64-17-5	396 ppm	5,000 ppm	100	PASS
Acetone	67-64-1	ND	5,000 ppm	100	PASS
Isopropanol	67-63-0	ND	5,000 ppm	100	PASS
Acetonitrile	75-05-8	ND	410 ppm	100	PASS
Hexane	110-54-3	ND	290 ppm	100	PASS
Heptane	142-82-5	ND	5,000 ppm	100	PASS

1) ND = Not detected at a level greater than the Reporting Limit (RL).

2) In ppm, based on USP recommended limits for residual solvents, adopted by the Massachusetts Department of Public Health for cannabis concentrates and extracts on 3/31/16. Butane/Propane limits are based on limits established for state of Colorado.

(\*) For ethanol, as many formulations contain flavorings based on ethanol extracts of natural products, no status has been assigned.

**END OF REPORT**