

# CERTIFICATE OF ANALYSIS

**PRODUCT NAME:** Joy Organics CBD Gummies for Sleep  
**PRODUCT STRENGTH:** 30mg CBD, 3mg CBN, 1mg THC, + 3mg Melatonin / gummy  
**BATCH:** 230803A  
**BEST BY DATE: HEMP** 6/22/2025  
**EXTRACT LOT:** 91721041

### Physical Attributes

Test	Method	Specification	Results
Color	Joy Internal	Purple	PASS
Odor	Joy Internal	Sweet, berry	PASS
Appearance	Joy Internal	Purple gummies with sugar coating in child proof container	PASS
Primary Package Eval.	Joy Internal	Container clean and free of filth. Container caps tight and seals intact	PASS
Secondary Package Eval.	Joy Internal	Labeling Compliance Checked, Sufficient cushion material exists. Box taped and secure.	PASS

### Review of Third-Party Analysis

Panel	Method	Specification	Results*	Pass/Fail
<b>Potency - Total CBD</b>	HPLC-UV DAD	*NLT 30 mg / gummy	<b>37mg</b>	PASS
<b>Potency - D9-THC</b>	HPLC-UV DAD	<0.3% (full spectrum)	<b>1.1mg</b>	PASS
<b>Expanded Pesticide Panel</b>	HPLC-QQQ	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	<b>Below LOQ</b>	PASS
<b>Microbial</b> Escherichia coli (STEC)	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	<b>Absent</b>	PASS
<b>Microbial</b> Salmonella	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	<b>Absent</b>	PASS
<b>Microbial</b> Yeast and Mold	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 <sup>2</sup> CFU/gram	<b>Below LOQ</b>	PASS
<b>Microbial</b> Total Coliforms*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 <sup>2</sup> CFU/gram	<b>Below LOQ</b>	PASS
<b>Microbial</b> Total Aerobic Count*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 <sup>3</sup> CFU/gram	<b>Below LOQ</b>	PASS
<b>Heavy Metals Panel</b>	ICP-MS	Arsenic (As): ≤1.5 ppm Cadmium (Cd): ≤0.5 ppm Lead (Pb): ≤0.5 ppm Mercury (Hg): ≤1.5 ppm	<b>Below LOQ</b>	PASS
<b>Mycotoxins</b>	ICP-MS	Total Aflatoxins <20 ppb† Aflatoxin B1 < 5 ppb Ochratoxin < 5ppb	<b>Below LOQ</b>	PASS
<b>Residual Solvents</b>	GC-HS-MSD	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	<b>Below LOQ</b>	PASS

\* \*Level of Quantitation, † Parts Per Million ‡ Part Per Billion CFU/g=Colony Forming Units per Gram  
 \* Nothing Less Than  
 10<sup>2</sup>=100 CFU  
 10<sup>3</sup>=1,000 CFU



8/18/2023

Quality Certified

Name

Date

Order No. 546113  
Sample No. 1165421

## SAMPLE INFORMATION

**Description** 30 mg CBD Sleep Gummy with Melatonin  
**Lot Number** 230803A  
**Category (Type)** Non-Inhalable Edible (Gummy)  
**Received** July 03, 2023

## ANALYTICAL RESULTS

**Analysis** Cannabinoid Profile  
**Instrument** Liquid Chromatography Diode Array Detector (LC-DAD)  
**Method** MF-CHEM-15  
**Analysis Date** July 03, 2023 to July 10, 2023

Cannabinoid	mg/g	%	mg/serving
Δ8-THC	ND	ND	ND
Δ9-THC	0.26	0.026	1.18
Δ9-THCA	ND	ND	ND
THCV	ND	ND	ND
THCVA	ND	ND	ND
CBD	8.27	0.827	37.06
CBDA	ND	ND	ND
CBC	0.12	0.012	0.56
CBCA	ND	ND	ND
CBDV	<LOQ	<LOQ	<LOQ
CBG	<LOQ	<LOQ	<LOQ
CBGA	ND	ND	ND
CBN	0.87	0.087	3.92
Total THC	0.26	0.026	1.18
Total CBD	8.27	0.827	37.06
Total Cannabinoids	9.53	0.953	42.72
Sum of Cannabinoids	9.53	0.953	42.72
<b>Serving Weight (g)</b>	4.4807		

**Comments** This result of this sample is confirmed with a retest.

Reported by  
**Anresco, Inc.**

Limit of Detection: 0.0133 mg/g  
Limit of Quantitation: 0.0400 mg/g  
ND = None Detected  
<LOQ = Below Limit of Quantitation  
LOD = Limit of Detection  
Total THC = Δ9-THC + (0.877 \* Δ9-THCA)  
Total CBD = CBD + (0.877 \* CBDA)  
Total Cannabinoids = Σ (neutral cannabinoids) + [0.877 \* Σ (acidic cannabinoids)]




Jacob Mintek  
Cannabis Operations

July 10, 2023

If there are any questions with this report, please contact "[compliance@anresco.com](mailto:compliance@anresco.com)".

## 30 mg CBD Sleep Gummy with Melatonin

Batch ID or Lot Number: <b>230803A</b>	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 2 of 5
Reported: <b>28Jun2023</b>	Started: 26Jun2023	Received: 26Jun2023	


### Residual Solvents - Colorado Compliance

Test ID: T000247461


Methods: TM04 (GC-MS): Residual

Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	115 - 2291	ND	
Butanes (Isobutane, n-Butane)	231 - 4616	ND	
Methanol	70 - 1391	ND	
Pentane	114 - 2278	ND	
Ethanol	118 - 2361	ND	
Acetone	112 - 2242	ND	
Isopropyl Alcohol	117 - 2339	ND	
Hexane	7 - 135	ND	
Ethyl Acetate	115 - 2300	ND	
Benzene	0.2 - 4.7	ND	
Heptanes	115 - 2296	ND	
Toluene	20 - 409	ND	
Xylenes (m,p,o-Xylenes)	154 - 3078	ND	

#### Final Approval

  
Sam Smith  
29Jun2023  
09:41:00 AM MDT

PREPARED BY / DATE

  
Karen Winternheimer  
29Jun2023  
09:45:00 AM MDT

APPROVED BY / DATE

## 30 mg CBD Sleep Gummy with Melatonin

Batch ID or Lot Number: <b>230803A</b>	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 3 of 5
Reported: <b>28Jun2023</b>	Started: 26Jun2023	Received: 26Jun2023	


### Pesticides


Test ID: T000247458

Methods: TM17

(LC-QQ LC MS/MS)	Dynamic Range (ppb)	Result (ppb)		Dynamic Range (ppb)	Result (ppb)	
Abamectin	308 - 2726	ND		Malathion	288 - 2702	ND
Acephate	43 - 2716	ND		Metalaxyl	46 - 2683	ND
Acetamiprid	42 - 2723	ND		Methiocarb	42 - 2713	ND
Azoxystrobin	46 - 2669	ND		Methomyl	42 - 2746	ND
Bifenazate	44 - 2667	ND		MGK 264 1	165 - 1708	ND
Boscalid	34 - 2701	ND		MGK 264 2	103 - 1089	ND
Carbaryl	39 - 2722	ND		Myclobutanil	45 - 2719	ND
Carbofuran	43 - 2710	ND		Naled	44 - 2717	ND
Chlorantraniliprole	43 - 2726	ND		Oxamyl	41 - 2764	ND
Chlorpyrifos	39 - 2759	ND		Paclobutrazol	46 - 2715	ND
Clofentezine	288 - 2741	ND		Permethrin	275 - 2730	ND
Diazinon	282 - 2686	ND		Phosmet	46 - 2656	ND
Dichlorvos	285 - 2755	ND		Prophos	293 - 2688	ND
Dimethoate	41 - 2731	ND		Propoxur	43 - 2714	ND
E-Fenpyroximate	272 - 2762	ND		Pyridaben	282 - 2760	ND
Etofenprox	43 - 2725	ND		Spinosad A	30 - 2076	ND
Etoxazole	278 - 2748	ND		Spinosad D	58 - 670	ND
Fenoxycarb	13 - 2670	ND		Spiromesifen	269 - 2733	ND
Fipronil	60 - 2716	ND		Spirotetramat	284 - 2693	ND
Flonicamid	52 - 2707	ND		Spiroxamine 1	18 - 1200	ND
Fludioxonil	306 - 2679	ND		Spiroxamine 2	24 - 1504	ND
Hexythiazox	40 - 2786	ND		Tebuconazole	287 - 2718	ND
Imazalil	267 - 2685	ND		Thiacloprid	41 - 2710	ND
Imidacloprid	45 - 2814	ND		Thiamethoxam	39 - 2741	ND
Kresoxim-methyl	45 - 2697	ND		Trifloxystrobin	44 - 2705	ND

### Final Approval

  
 Karen Winternheimer  
 29Jun2023  
 10:44:00 AM MDT  
 PREPARED BY / DATE

  
 Sam Smith  
 29Jun2023  
 10:46:00 AM MDT  
 APPROVED BY / DATE

### 30 mg CBD Sleep Gummy with Melatonin

Batch ID or Lot Number: <b>230803A</b>	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 4 of 5
Reported: <b>28Jun2023</b>	Started: 26Jun2023	Received: 26Jun2023	

### Microbial Contaminants - Colorado Compliance

Test ID: T000247459  
Methods: TM25 (qPCR) TM24, TM26, TM27 (Culture Plating): Microbial (Colorado Panel)

	Method	LOD	Quantitation Range	Result	Notes
STEC	TM25: PCR	10 <sup>0</sup> CFU/25g	NA	Absent	Free from visual mold, mildew, and foreign matter
<i>Salmonella</i>	TM25: PCR	10 <sup>0</sup> CFU/25g	NA	Absent	
Total Yeast and Mold*	TM24: Culture Plating	10 <sup>1</sup> CFU/g	1.0x10 <sup>2</sup> - 1.5x10 <sup>4</sup>	None Detected	
Total Aerobic Count*	TM26: Culture Plating	10 <sup>2</sup> CFU/g	1.0x10 <sup>3</sup> - 1.5x10 <sup>5</sup>	<LLOQ	
Total Coliforms*	TM27: Culture Plating	10 <sup>1</sup> CFU/g	1.0x10 <sup>2</sup> - 1.5x10 <sup>4</sup>	None Detected	

#### Final Approval

 Eden Thompson-Wright 29Jun2023 10:28:00 AM MDT	 Brianne Maillot 29Jun2023 03:00:00 PM MDT
PREPARED BY / DATE	APPROVED BY / DATE

### Heavy Metals - Colorado Compliance

Test ID: T000247460  
Methods: TM19 (ICP-MS): Heavy Metals

Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.03 - 3.25	ND	
Cadmium	0.05 - 4.67	ND	
Mercury	0.04 - 3.85	ND	
Lead	0.04 - 3.98	0.07	

#### Final Approval

 Sam Smith 30Jun2023 10:19:00 AM MDT	 Karen Winternheimer 30Jun2023 10:25:00 AM MDT
PREPARED BY / DATE	APPROVED BY / DATE

## 30 mg CBD Sleep Gummy with Melatonin

Batch ID or Lot Number: <b>230803A</b>	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 5 of 5
Reported: <b>28Jun2023</b>	Started: 26Jun2023	Received: 26Jun2023	


### Mycotoxins - Colorado Compliance


Test ID: T000247462

Methods: TM18 (UHPLC-QQQ)

LCMS/MS: Mycotoxins	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	2.28 - 131.86	ND	N/A
Aflatoxin B1	1.01 - 32.40	ND	
Aflatoxin B2	1.01 - 33.51	ND	
Aflatoxin G1	1.14 - 32.60	ND	
Aflatoxin G2	1.14 - 33.87	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	

### Final Approval

  
 Sam Smith  
 03Jul2023  
 08:46:00 AM MDT  
 PREPARED BY / DATE

  
 Karen Winternheimer  
 03Jul2023  
 08:49:00 AM MDT  
 APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uiid/a945fa85-8fb7-4fef-91d7-a0957b7366f4>

**Definitions**  
 LOD = Limit of Detection, ULOQ = Upper Limit of Quantitation, LLOQ = Lower Limit of Quantitation, PPB = Parts per Billion, % = % (w/w) = Percent (weight of analyte / weight of product). ND = None Detected (defined by dynamic range of the method). Total Potential Delta 9-THC or CBD is calculated to take into account the loss of a carboxyl group during decarboxylation step, using the following formulas: Total Potential Delta 9-THC = Delta 9-THC + (Delta 9-THCa \* (0.877)) and Total CBD = CBD + (CBDa \* (0.877)). Fail equates to a concentration level of Delta 9-THC, on a dry weight basis, higher than 0.3 percent + or - the measurement uncertainty. Total Potential THC is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step. Total THC = THC + (THCa \* (0.877)). ALOQ = Above Limit Of Quantitation (defined by dynamic range of the method), CFU/g = Colony Forming Units per Gram. Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form. Examples: 10<sup>2</sup> = 100 CFU, 10<sup>3</sup> = 1,000 CFU, 10<sup>4</sup> = 10,000 CFU, 10<sup>5</sup> = 100,000 CFU.

Testing results are based solely upon the sample submitted to SC Laboratories, Inc., in the condition it was received. SC Laboratories, Inc., warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of SC Laboratories, Inc. ISO/IEC 17025:2017 Accredited by A2LA. Some tests listed on this COA may not be within our scope of A2LA accreditation. Please visit [A2LA for more details](#).



Cert #4329.02  
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### 30 mg CBD Sleep Gummy with Melatonin

Batch ID or Lot Number: <b>230803A</b>	Test: <b>Microbial Contaminants</b>	Reported: <b>11Aug2023</b>	USDA License: N/A
Matrix: Finished Product	Test ID: T000251736	Started: 08Aug2023	Sampler ID: N/A
	Method(s): TM25 (qPCR) TM24, TM26, TM27 (Culture Plating): Microbial (Colorado Panel)	Received: 07Aug2023	Status: Active

### Microbial Contaminants

Contaminants	Method	LOD	Quantitation Range	Result	Notes
STEC	TM25: PCR	10 <sup>0</sup> CFU/25g	NA	Absent	Free from visual mold, mildew, and foreign matter
<i>Salmonella</i>	TM25: PCR	10 <sup>0</sup> CFU/25g	NA	Absent	
Total Yeast and Mold*	TM24: Culture Plating	10 <sup>1</sup> CFU/g	1.0x10 <sup>2</sup> - 1.5x10 <sup>4</sup>	None Detected	
Total Aerobic Count*	TM26: Culture Plating	10 <sup>2</sup> CFU/g	1.0x10 <sup>3</sup> - 1.5x10 <sup>5</sup>	None Detected	
Total Coliforms*	TM27: Culture Plating	10 <sup>1</sup> CFU/g	1.0x10 <sup>2</sup> - 1.5x10 <sup>4</sup>	None Detected	

### Final Approval



Brianne Maillot  
11Aug2023  
09:04:00 AM MDT

PREPARED BY / DATE



Eden Thompson-Wright  
11Aug2023  
09:46:00 AM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/50f57a64-a2ac-4dc9-abe7-124e7134d216>

#### Definitions

\* Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form. Examples: 10<sup>2</sup> = 100 CFU, 10<sup>3</sup> = 1,000 CFU, 10<sup>4</sup> = 10,000 CFU, 10<sup>5</sup> = 100,000 CFU  
CFU/g = Colony Forming Units per Gram, LOD = Limit of Detection  
ULOQ = Upper Limit of Quantitation, LLOQ = Lower Limit of Quantitation  
STEC = Shiga Toxin-Producing E. coli

Testing results are based solely upon the sample submitted to SC Laboratories, Inc., in the condition it was received. SC Laboratories, Inc., warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of SC Laboratories, Inc. ISO/IEC 17025:2017 Accredited by A2LA.



Cert #4329.02

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