

# CERTIFICATE OF ANALYSIS

**PRODUCT NAME:** Certified Organic Full Spectrum CBD Massage Oil  
**PRODUCT STRENGTH:** 500 mg per bottle  
**TINCTURE BATCH:** 220823B  
**BEST BY DATE:** 8/23/2024

### Physical Attributes

Test	Method	Specification	Results
Color	Joy Internal	Golden to Amber	PASS
Odor	Joy Internal	Characteristic - Olive and Hemp	PASS
Appearance	Joy Internal	Golden to Amber oil in brown glass bottle with dropper.	PASS
Primary Package Eval.	Joy Internal	Container clean and free of filth. Container caps tight and shrink bands intact	PASS
Secondary Package Eval.	Joy Internal	Labeling Compliance Checked, Cartons sturdy and clean. 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	LOQ*: ≥ product strength mg / bottle	<b>495.55mg</b>	PASS
<b>Potency - D9-THC</b>	HPLC-UV DAD	LOQ: <0.3% total THC (Full spectrum)	<b>ND</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</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 < 42 ppb Ochratoxin < 42 ppb	<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 Quantification  
 \*\*Colony Forming Units per Gram  
 † Parts Per Million †† Part Per Billion

Values expressed in scientific notation.  
 Examples:  
 10<sup>2</sup>=100  
 10<sup>3</sup>=1,000

Quality Certified  \_\_\_\_\_ Date 9/7/22

Coral Cronin

Prepared for:

**JOY ORGANICS**

5042 Technology Parkway Ste. 500  
FT. COLLINS, CO USA 80528

## Massage Oil 500mg-220823B

Batch ID or Lot Number: <b>LUB500-220823B</b>	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 1 of 5
Reported: <b>31Aug2022</b>	Started: 30Aug2022	Received: 26Aug2022	

## Cannabinoids - Colorado Compliance

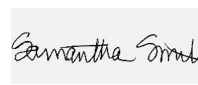
Test ID: T000219673

Methods: TM14 (HPLC-DAD): Potency - Standard

Cannabinoid Analysis	LOD (%)	LOQ (%)	Result (%)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.009	0.030	<LOQ	0.16	
Cannabichromenic Acid (CBCA)	0.009	0.027	ND	ND	
Cannabidiol (CBD)	0.025	0.078	0.437	4.37	
Cannabidiolic Acid (CBDA)	0.026	0.080	ND	ND	
Cannabidivarin (CBDV)	0.006	0.018	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.011	0.033	ND	ND	
Cannabigerol (CBG)	0.005	0.017	ND	ND	
Cannabigerolic Acid (CBGA)	0.022	0.071	ND	ND	
Cannabinol (CBN)	0.007	0.022	ND	ND	
Cannabinolic Acid (CBNA)	0.015	0.048	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.027	0.084	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.024	0.076	ND	ND	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.021	0.068	ND	ND	
Tetrahydrocannabivarin (THCV)	0.005	0.015	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.019	0.060	ND	ND	
<b>Total Cannabinoids</b>			<b>0.453</b>	<b>4.53</b>	
Total Potential THC			ND	ND	
Total Potential CBD			0.437	4.37	

### Final Approval

  
 Jacob Miller  
 31Aug2022  
 12:21:00 PM MDT  
 PREPARED BY / DATE

  
 Sam Smith  
 31Aug2022  
 12:26:00 PM MDT  
 APPROVED BY / DATE

Prepared for:

**JOY ORGANICS**

5042 Technology Parkway Ste. 500  
FT. COLLINS, CO USA 80528

## Massage Oil 500mg-220823B

Batch ID or Lot Number: <b>LUB500-220823B</b>	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 2 of 5
Reported: <b>31Aug2022</b>	Started: 30Aug2022	Received: 26Aug2022	


## Pesticides


Test ID: T000219674

Methods: TM17

(LC-QQ LC MS/MS)	Dynamic Range (ppb)	Result (ppb)		Dynamic Range (ppb)	Result (ppb)	
Abamectin	336 - 2764	ND		Malathion	286 - 2727	ND
Acephate	38 - 2825	ND		Metalaxyl	44 - 2773	ND
Acetamiprid	40 - 2748	ND		Methiocarb	43 - 2781	ND
Azoxystrobin	44 - 2772	ND		Methomyl	41 - 2781	ND
Bifenazate	39 - 2738	ND		MGK 264 1	169 - 1643	ND
Boscalid	41 - 2797	ND		MGK 264 2	101 - 1157	ND
Carbaryl	40 - 2768	ND		Myclobutanil	48 - 2791	ND
Carbofuran	40 - 2730	ND		Naled	48 - 2779	ND
Chlorantraniliprole	40 - 2745	ND		Oxamyl	42 - 2787	ND
Chlorpyrifos	39 - 2718	ND		Paclobutrazol	42 - 2723	ND
Clofentezine	270 - 2766	ND		Permethrin	289 - 2741	ND
Diazinon	280 - 2765	ND		Phosmet	41 - 2743	ND
Dichlorvos	252 - 2767	ND		Prophos	282 - 2763	ND
Dimethoate	42 - 2738	ND		Propoxur	42 - 2745	ND
E-Fenpyroximate	296 - 2734	ND		Pyridaben	295 - 2753	ND
Etofenprox	42 - 2689	ND		Spinosad A	35 - 2247	ND
Etoxazole	299 - 2720	ND		Spinosad D	48 - 498	ND
Fenoxycarb	41 - 2752	ND		Spiromesifen	283 - 2740	ND
Fipronil	20 - 2847	ND		Spirotetramat	276 - 2798	ND
Flonicamid	50 - 2754	ND		Spiroxamine 1	18 - 1189	ND
Fludioxonil	273 - 2782	ND		Spiroxamine 2	24 - 1591	ND
Hexythiazox	42 - 2699	ND		Tebuconazole	288 - 2837	ND
Imazalil	262 - 2789	ND		Thiacloprid	42 - 2744	ND
Imidacloprid	40 - 2747	ND		Thiamethoxam	40 - 2776	ND
Kresoxim-methyl	42 - 2813	ND		Trifloxystrobin	44 - 2745	ND

## Final Approval

  
Daniel Weidensaul  
01Sep2022  
01:40:00 PM MDT  
PREPARED BY / DATE

  
Karen Winternheimer  
01Sep2022  
01:46:00 PM MDT  
APPROVED BY / DATE

Prepared for:

**JOY ORGANICS**

5042 Technology Parkway Ste. 500  
FT. COLLINS, CO USA 80528

## Massage Oil 500mg-220823B

Batch ID or Lot Number: <b>LUB500-220823B</b>	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 3 of 5
Reported: <b>31Aug2022</b>	Started: 30Aug2022	Received: 26Aug2022	

## Residual Solvents - Colorado Compliance

Test ID: T000219677

Methods: TM04 (GC-MS): Residual

Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	84 - 1690	ND	
Butanes (Isobutane, n-Butane)	177 - 3549	ND	
Methanol	58 - 1151	ND	
Pentane	94 - 1883	ND	
Ethanol	91 - 1817	ND	
Acetone	94 - 1887	ND	
Isopropyl Alcohol	95 - 1908	ND	
Hexane	6 - 115	ND	
Ethyl Acetate	95 - 1908	ND	
Benzene	0.2 - 3.9	ND	
Heptanes	95 - 1899	ND	
Toluene	17 - 340	ND	
Xylenes (m,p,o-Xylenes)	126 - 2512	ND	

### Final Approval



Daniel Weidensaul  
01Sep2022  
05:11:00 PM MDT

PREPARED BY / DATE



Jacob Miller  
01Sep2022  
05:13:00 PM MDT

APPROVED BY / DATE

Prepared for:

**JOY ORGANICS**

5042 Technology Parkway Ste. 500  
FT. COLLINS, CO USA 80528

## Massage Oil 500mg-220823B

Batch ID or Lot Number: <b>LUB500-220823B</b>	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 4 of 5
Reported: <b>31Aug2022</b>	Started: 30Aug2022	Received: 26Aug2022	


## Heavy Metals - Colorado Compliance


Test ID: T000219676

Methods: TM19 (ICP-MS): Heavy

Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.05 - 4.54	ND	
Cadmium	0.05 - 4.59	ND	
Mercury	0.04 - 4.45	ND	
Lead	0.04 - 4.48	ND	

### Final Approval

  
Daniel Weidensaul  
02Sep2022  
01:45:00 PM MDT  
PREPARED BY / DATE

  
Courtney Richards  
02Sep2022  
05:18:00 PM MDT  
APPROVED BY / DATE

## Mycotoxins - Colorado Compliance

Test ID: T000219678


Methods: TM18 (UHPLC-QQQ

LCMS/MS): Mycotoxins

LCMS/MS): Mycotoxins	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	1.96 - 128.14	ND	N/A
Aflatoxin B1	0.95 - 30.66	ND	
Aflatoxin B2	0.95 - 31.12	ND	
Aflatoxin G1	1.04 - 31.55	ND	
Aflatoxin G2	1.04 - 31.89	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	

### Final Approval

  
Jacob Miller  
06Sep2022  
03:10:00 PM MDT  
PREPARED BY / DATE

  
Sam Smith  
06Sep2022  
03:14:00 PM MDT  
APPROVED BY / DATE

# CERTIFICATE OF ANALYSIS

Prepared for:  
**JOY ORGANICS**

5042 Technology Parkway Ste. 500  
FT. COLLINS, CO USA 80528

## Massage Oil 500mg - 220823B

Batch ID or Lot Number: <b>LUB500-220823B</b>	Test: <b>Microbial Contaminants</b>	Reported: <b>02Sep2022</b>	USDA License: N/A
Matrix: Finished Product	Test ID: T000219792	Started: 30Aug2022	Sampler ID: N/A
	Method(s): TM25 (qPCR) TM24, TM26, TM27 (Culture Plating): Microbial (Colorado Panel)	Received: 29Aug2022	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



Eden Thompson-Wright  
02Sep2022  
12:00:00 PM MDT

PREPARED BY / DATE



Jacob Folkerts  
02Sep2022  
03:33:00 PM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/74a492c4-f220-4bca-b8d2-ac534b45bfff>

### 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.



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CDPHE Certified

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