

CERTIFICATE OF ANALYSIS

PRODUCT NAME: CBD Sports Cream
PRODUCT STRENGTH: 1000mg / bottle
BATCH: 25191-09
BEST BY DATE: 7/25/2027

Physical Attributes

Test	Method	Specification	Results
Color	Joy Internal	White to off white	PASS
Odor	Joy Internal	Blend of Menthol, Camphor, Eucalyptus, Lavender, Rosemary, Wintergreen & Marjoram.	PASS
Appearance	Joy Internal	Creamy smooth cream consistency with medium viscosity	PASS
Primary Package Eval.	Joy Internal	Container clean and free of filth. Lid 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
Potency - Total CBD	HPLC-UV DAD	LOQ*: ≥ 1000mg / bottle	1118mg	PASS
Potency - D9-THC	HPLC-UV DAD	LOQ: <0.01% THC (Broad Spectrum)	Below LOQ	PASS
Expanded Pesticide Panel	HPLC-QQQ	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	Below LOQ	PASS
Microbial Escherichia coli (STEC)	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 **CFU/25	Absent	PASS
Microbial Salmonella	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	Absent	PASS
Microbial Yeast and Mold	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 ² CFU/gram	Below LOQ	PASS
Microbial Total Coliforms*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 ² CFU/gram	Below LOQ	PASS
Microbial Total Aerobic Count*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 ³ CFU/gram	Below LOQ	PASS
Heavy Metals	ICP-MS	Arsenic (As): ≤1.5 ppm† Cadmium (Cd): ≤0.5 ppm Lead (Pb): ≤0.5 ppm Mercury (Hg): ≤1.5 ppm	Below LOQ	PASS
Mycotoxins	ICP-MS	Total Aflatoxins <20 ppb†† Afltoxin B1 < 5 ppb Ochratoxin < 5ppb	Below LOQ	PASS
Residual Solvents	GC-HS-MSD	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	Below LOQ	PASS

*Level of Quantification
 **Colony Forming Units per Gram
 † Parts Per Million †† Part Per Billion

Values expressed in scientific notation.
 Examples:
 10⁻²=100
 10⁻³=1,000

Quality Certified  : 1614247
 Name _____ Date _____

SAMPLE DETAILS
SAMPLE NAME: 1000mg CBD Sports Cream

Infused, Topical

SAMPLE DETAIL
Batch Number: 25191-09

Sample ID: 250725R001

Date Collected: 07/25/2025

Date Received: 07/25/2025

Batch Size:
Sample Size: 1.0 unit

Unit Mass: 113 grams per Unit

Serving Size:


Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY
Total THC: **Not Detected**
Total CBD: **1118.248 mg/unit**
Sum of Cannabinoids: **1149.662 mg/unit**
Total Cannabinoids: **1149.662 mg/unit**

Total THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during the decarboxylation step:

$$\text{Total THC} = \Delta^9\text{-THC} + (\text{THCa} \cdot 0.877)$$

$$\text{Total CBD} = \text{CBD} + (\text{CBDa} \cdot 0.877)$$

$$\text{Sum of Cannabinoids} = \Delta^9\text{-THC} + \text{THCa} + \text{CBD} + \text{CBDa} + \text{CBG} + \text{CBGa} +$$

$$\text{THCV} + \text{THCVa} + \text{CBC} + \text{CBCa} + \text{CBDV} + \text{CBDVa} + \Delta^8\text{-THC} + \text{CBL} + \text{CBN}$$

$$\text{Total Cannabinoids} = (\Delta^9\text{-THC} + 0.877 \cdot \text{THCa}) + (\text{CBD} + 0.877 \cdot \text{CBDa}) +$$

$$(\text{CBG} + 0.877 \cdot \text{CBGa}) + (\text{THCV} + 0.877 \cdot \text{THCVa}) + (\text{CBC} + 0.877 \cdot \text{CBCa}) +$$

$$(\text{CBDV} + 0.877 \cdot \text{CBDVa}) + \Delta^8\text{-THC} + \text{CBL} + \text{CBN}$$
SAFETY ANALYSIS - SUMMARY
Pesticides: **PASS**
Mycotoxins: **PASS**
Residual Solvents: **PASS**
Heavy Metals: **PASS**
Microbiology (PCR): **PASS**
Microbiology (Plating): **ND**

These results relate only to the sample included on this report.

This report shall not be reproduced, except in full, without written approval of the laboratory.

Sample Certification: California Code of Regulations Title 4 Division 19. Department of Cannabis Control Business and Professions Code. Reference: Sections 26100, 26104 and 26110, Business and Professions Code.

Decision Rule: Statements of conformity (e.g. Pass/Fail) to specifications are made in this report without taking measurement uncertainty into account. Where statements of conformity are made in this report, the following decision rules are applied: PASS - Results within limits/specifications, FAIL - Results exceed limits/specifications.

References: limit of detection (LOD), limit of quantification (LOQ), not detected (ND), not tested (NT), $\mu\text{g/g}$ = ppm, $\mu\text{g/kg}$ = ppb, too numerous to count >250 cfu/plate (TNTC), colony-forming unit (cfu)


 LQC verified by: Erik Anderson
 Job Title: Laboratory Assistant
 Date: 07/30/2025


 Approved by: Josh Wurzer
 Job Title: Chief Compliance Officer
 Date: 07/30/2025



Cannabinoid Analysis

Tested by high-performance liquid chromatography with diode-array detection (HPLC-DAD).

Method: QSP 1157 - Analysis of Cannabinoids by HPLC-DAD

TOTAL THC: **Not Detected**

Total THC (Δ^9 -THC+0.877*THCa)

TOTAL CBD: **1118.248 mg/unit**

Total CBD (CBD+0.877*CBDA)

TOTAL CANNABINOIDS: **1149.662 mg/unit**

Total Cannabinoids (Total THC) + (Total CBD) + (Total CBG) + (Total THCV) + (Total CBC) + (Total CBDV) + Δ^8 -THC + CBL + CBN

TOTAL CBG: **27.459 mg/unit**

Total CBG (CBG+0.877*CBGa)

TOTAL THCV: **ND**

Total THCV (THCV+0.877*THCVa)

TOTAL CBC: **ND**

Total CBC (CBC+0.877*CBCa)

TOTAL CBDV: **3.955 mg/unit**

Total CBDV (CBDV+0.877*CBDVa)

Pesticide Analysis

Pesticide and plant growth regulator analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS) or gas chromatography-mass spectrometry (GC-MS).

*GC-MS utilized where indicated.

Method: QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS or QSP 1213 - Analysis of Pesticides by GC-MS

CANNABINOID TEST RESULTS - 07/28/2025

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
CBD	0.004 / 0.011	±0.3691	9.896	0.9896
CBG	0.002 / 0.006	±0.0118	0.243	0.0243
CBDV	0.002 / 0.012	±0.0014	0.035	0.0035
Δ^9 -THC	0.002 / 0.014	N/A	ND	ND
Δ^8 -THC	0.01 / 0.02	N/A	ND	ND
THCa	0.001 / 0.005	N/A	ND	ND
THCV	0.002 / 0.012	N/A	ND	ND
THCVa	0.002 / 0.019	N/A	ND	ND
CBDA	0.001 / 0.026	N/A	ND	ND
CBDVa	0.001 / 0.018	N/A	ND	ND
CBGa	0.002 / 0.007	N/A	ND	ND
CBL	0.003 / 0.010	N/A	ND	ND
CBN	0.001 / 0.007	N/A	ND	ND
CBC	0.003 / 0.010	N/A	ND	ND
CBCa	0.001 / 0.015	N/A	ND	ND
SUM OF CANNABINOIDS			10.174 mg/g	1.0174%

Unit Mass: 113 grams per Unit

Δ^9 -THC per Unit	ND
Total THC per Unit	ND
CBD per Unit	1118.248 mg/unit
Total CBD per Unit	1118.248 mg/unit
Sum of Cannabinoids per Unit	1149.662 mg/unit
Total Cannabinoids per Unit	1149.662 mg/unit

PESTICIDE TEST RESULTS - 07/28/2025 ✔ PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Abamectin	0.032 / 0.097	0.3	N/A	ND	PASS
Acephate	0.006 / 0.018	5	N/A	ND	PASS
Acequinocyl	0.009 / 0.027	4	N/A	ND	PASS
Acetamiprid	0.016 / 0.049	5	N/A	ND	PASS
Aldicarb	0.030 / 0.090	≥ LOD	N/A	ND	PASS
Allethrin	0.030 / 0.092		N/A	ND	
Atrazine	0.006 / 0.019		N/A	ND	
Azadirachtin	0.082 / 0.248		N/A	ND	
Azoxystrobin	0.003 / 0.009	40	N/A	ND	PASS
Benzovindiflupyr	0.003 / 0.009		N/A	ND	
Bifenazate	0.003 / 0.009	5	N/A	ND	PASS

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Pesticide Analysis *Continued*

PESTICIDE TEST RESULTS - 07/28/2025 *continued*  **PASS**

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Bifenthrin	0.021 / 0.064	0.5	N/A	ND	PASS
Boscalid	0.003 / 0.009	10	N/A	ND	PASS
Buprofezin [‡]	0.006 / 0.019		N/A	ND	
Carbaryl	0.007 / 0.020	0.5	N/A	ND	PASS
Carbofuran	0.003 / 0.008	≥ LOD	N/A	ND	PASS
Chlorantraniliprole	0.006 / 0.018	40	N/A	ND	PASS
Chlorfenapyr*	0.005 / 0.015	≥ LOD	N/A	ND	PASS
Chlorpyrifos	0.013 / 0.039	≥ LOD	N/A	ND	PASS
Clofentezine	0.003 / 0.009	0.5	N/A	ND	PASS
Clothianidin	0.008 / 0.025		N/A	ND	
Coumaphos	0.003 / 0.010	≥ LOD	N/A	ND	PASS
Cyantraniliprole	0.003 / 0.010		N/A	ND	
Cyfluthrin	0.052 / 0.159	1	N/A	ND	PASS
Cypermethrin	0.051 / 0.153	1	N/A	ND	PASS
Cyprodinil [‡]	0.003 / 0.008		N/A	<LOQ	
Daminozide	0.026 / 0.077	≥ LOD	N/A	ND	PASS
Deltamethrin	0.059 / 0.180		N/A	ND	
Diazinon	0.006 / 0.017	0.2	N/A	ND	PASS
Dichlorvos (DDVP)	0.012 / 0.038	≥ LOD	N/A	ND	PASS
Dimethoate	0.003 / 0.009	≥ LOD	N/A	ND	PASS
Dimethomorph	0.016 / 0.050	20	N/A	ND	PASS
Dinotefuran	0.010 / 0.030		N/A	ND	
Diuron	0.013 / 0.040		N/A	ND	
Dodemorph	0.012 / 0.035		N/A	ND	
Endosulfan sulfate	0.016 / 0.048		N/A	ND	
Endosulfan-α*	0.004 / 0.014		N/A	ND	
Endosulfan-β*	0.006 / 0.019		N/A	ND	
Ethoprophos	0.003 / 0.009	≥ LOD	N/A	ND	PASS
Etofenprox	0.014 / 0.042	≥ LOD	N/A	ND	PASS
Etozazole	0.007 / 0.020	1.5	N/A	ND	PASS
Etridiazole*	0.002 / 0.005		N/A	ND	
Fenhexamid	0.003 / 0.008	10	N/A	ND	PASS
Fenoxycarb	0.003 / 0.010	≥ LOD	N/A	ND	PASS
Fenpyroximate	0.007 / 0.020	2	N/A	ND	PASS
Fensulfothion	0.003 / 0.010		N/A	ND	
Fenthion	0.003 / 0.010		N/A	ND	
Fenvalerate [‡]	0.033 / 0.099		N/A	ND	
Fipronil	0.003 / 0.010	≥ LOD	N/A	ND	PASS
Flonicamid	0.007 / 0.022	2	N/A	ND	PASS
Fludioxonil	0.003 / 0.010	30	N/A	ND	PASS
Fluopyram [‡]	0.003 / 0.009		N/A	ND	

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Pesticide Analysis *Continued*

PESTICIDE TEST RESULTS - 07/28/2025 *continued* ✔ **PASS**

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Hexythiazox	0.003 / 0.010	2	N/A	ND	PASS
Imazalil	0.003 / 0.009	≥ LOD	N/A	ND	PASS
Imidacloprid	0.003 / 0.010	3	N/A	ND	PASS
Iprodione	0.077 / 0.233		N/A	ND	
Kinoprene	0.077 / 0.233		N/A	ND	
Kresoxim-methyl	0.006 / 0.019	1	N/A	ND	PASS
λ-Cyhalothrin	0.068 / 0.206		N/A	ND	
Malathion	0.003 / 0.009	5	N/A	ND	PASS
Metalaxyl	0.003 / 0.010	15	N/A	ND	PASS
Methiocarb	0.003 / 0.008	≥ LOD	N/A	ND	PASS
Methomyl	0.008 / 0.025	0.1	N/A	ND	PASS
Methoprene	0.172 / 0.521		N/A	ND	
Mevinphos	0.008 / 0.024	≥ LOD	N/A	ND	PASS
MGK-264	0.015 / 0.047		N/A	ND	
Myclobutanil	0.003 / 0.009	9	N/A	ND	PASS
Naled	0.021 / 0.064	0.5	N/A	ND	PASS
Novaluron	0.002 / 0.005		N/A	ND	
Oxamyl	0.017 / 0.051	0.2	N/A	ND	PASS
Paclobutrazol	0.003 / 0.010	≥ LOD	N/A	ND	PASS
Parathion-methyl	0.016 / 0.050	≥ LOD	N/A	ND	PASS
Pentachloronitrobenzene (Quintozene)*	0.004 / 0.012	0.2	N/A	ND	PASS
Permethrin	0.056 / 0.168	20	N/A	ND	PASS
Phenothrin	0.016 / 0.047		N/A	ND	
Phosmet	0.007 / 0.020	0.2	N/A	ND	PASS
Piperonyl Butoxide	0.010 / 0.029	8	N/A	ND	PASS
Pirimicarb	0.003 / 0.009		N/A	ND	
Prallethrin	0.015 / 0.046	0.4	N/A	ND	PASS
Propiconazole	0.027 / 0.080	20	N/A	ND	PASS
Propoxur	0.003 / 0.008	≥ LOD	N/A	ND	PASS
Pyraclostrobin	0.003 / 0.010		N/A	ND	
Pyrethrins	0.016 / 0.049	1	N/A	ND	PASS
Pyridaben	0.005 / 0.017	3	N/A	ND	PASS
Pyriproxyfen	0.003 / 0.009		N/A	ND	
Resmethrin	0.013 / 0.039		N/A	ND	
Spinetoram	0.003 / 0.010	3	N/A	ND	PASS
Spinosad	0.003 / 0.010	3	N/A	ND	PASS
Spirodiclofen	0.031 / 0.093		N/A	ND	
Spiromesifen	0.016 / 0.050	12	N/A	ND	PASS
Spirotetramat	0.003 / 0.010	13	N/A	ND	PASS
Spiroxamine	0.020 / 0.062	≥ LOD	N/A	ND	PASS
Tebuconazole	0.003 / 0.010	2	N/A	ND	PASS

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Pesticide Analysis *Continued*

PESTICIDE TEST RESULTS - 07/28/2025 *continued* ✔ PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Tebufenozide	0.003 / 0.008		N/A	ND	
Teflubenzuron	0.007 / 0.022		N/A	ND	
Tetrachlorvinphos	0.003 / 0.008		N/A	ND	
Tetramethrin	0.021 / 0.063		N/A	ND	
Thiabendazole	0.006 / 0.020		N/A	ND	
Thiacloprid	0.003 / 0.009	≥ LOD	N/A	ND	PASS
Thiamethoxam	0.003 / 0.010	4.5	N/A	ND	PASS
Thiophanate-methyl	0.013 / 0.040		N/A	ND	
Trifloxystrobin	0.003 / 0.009	30	N/A	ND	PASS



Mycotoxin Analysis

MYCOTOXIN TEST RESULTS - 07/28/2025 ✔ PASS

Mycotoxin analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS).

Method: QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS

COMPOUND	LOD/LOQ (µg/kg)	ACTION LIMIT (µg/kg)	MEASUREMENT UNCERTAINTY (µg/kg)	RESULT (µg/kg)	RESULT
Aflatoxin B1	1.6 / 5.0		N/A	ND	
Aflatoxin B2	1.4 / 4.1		N/A	ND	
Aflatoxin G1	1.6 / 4.9		N/A	ND	
Aflatoxin G2	1.6 / 5.0		N/A	ND	
Ochratoxin A	1.6 / 5.0	20	N/A	ND	PASS
Total Aflatoxin		20		ND	PASS



Residual Solvents Analysis

RESIDUAL SOLVENTS TEST RESULTS - 07/28/2025 ✔ PASS

Residual Solvent analysis utilizing gas chromatography-mass spectrometry (GC-MS).

Method: QSP 1204 - Analysis of Residual Solvents by GC-MS

Total Butanes = n-Butane + 2-Methylpropane (Isobutane)
Total Heptanes = 2,2-Dimethylpentane (Neoheptane) + 2,3-Dimethylpentane + 2,4-Dimethylpentane + 3,3-Dimethylpentane + 2,2,3-Trimethylbutane (Triptane) + 2-Methylhexane (Isoheptane) + 3-Methylhexane + 3-Ethylpentane + n-Heptane
Total Xylenes = 1,2-Dimethylbenzene (o-Xylene) + 1,3-Dimethylbenzene (m-Xylene) / 1,4-Dimethylbenzene (p-Xylene)

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Propane	0.234 / 0.781	5000	N/A	ND	PASS
2-Methylpropane (Isobutane)	0.052 / 0.173		N/A	ND	
n-Butane	0.019 / 0.063	5000	N/A	ND	PASS
Total Butanes				ND	
n-Pentane	0.310 / 1.033	5000	N/A	ND	PASS
n-Hexane	0.110 / 0.366	290	±0.0233	1.024	PASS
2,2-Dimethylpentane (Neoheptane)	0.493 / 1.642		N/A	ND	
2,3-Dimethylpentane	1.009 / 3.365		N/A	ND	
2,4-Dimethylpentane	0.737 / 2.458		N/A	ND	
3,3-Dimethylpentane	0.198 / 0.660		N/A	ND	
2,2,3-Trimethylbutane (Triptane)	0.521 / 1.738		N/A	ND	
2-Methylhexane (Isoheptane)	0.610 / 2.034		N/A	ND	
3-Methylhexane	0.235 / 0.785		N/A	ND	
3-Ethylpentane	0.304 / 1.012		N/A	ND	

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Residual Solvents Analysis
Continued

RESIDUAL SOLVENTS TEST RESULTS - 07/28/2025 *continued* ✔ PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
n-Heptane	13.12 / 43.72	5000	N/A	ND	PASS
Total Heptanes				ND	
Benzene	0.089 / 0.295	1	N/A	ND	PASS
Toluene	0.115 / 0.382	890	N/A	ND	PASS
1,3-Dimethylbenzene (m-Xylene) / 1,4-Dimethylbenzene (p-Xylene)	0.451 / 1.502		N/A	ND	
1,2-Dimethylbenzene (o-Xylene)	0.387 / 1.289		N/A	ND	
Total Xylenes		2170		ND	PASS
Methanol	53.92 / 163.4	3000	N/A	ND	PASS
Ethanol	8.984 / 27.23		N/A	ND	
2-Propanol (Isopropyl Alcohol)	8.421 / 25.52		±3.679	255.48	
Acetone	10.59 / 32.08	5000	N/A	ND	PASS
Ethyl Acetate	1.123 / 3.745	5000	N/A	ND	PASS

Heavy Metals Analysis

HEAVY METALS TEST RESULTS - 07/29/2025 ✔ PASS

Heavy metal analysis utilizing inductively coupled plasma-mass spectrometry (ICP-MS).

Method: QSP 1160 - Analysis of Heavy Metals by ICP-MS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Arsenic	0.02 / 0.1	1.5	N/A	<LOQ	PASS
Cadmium	0.02 / 0.05	0.5	N/A	ND	PASS
Lead	0.04 / 0.1	0.5	N/A	ND	PASS
Mercury	0.002 / 0.01	3	N/A	ND	PASS

Microbiology Analysis
 PCR AND PLATING

MICROBIOLOGY TEST RESULTS (PCR) - 07/30/2025 ✔ PASS

Analysis conducted by polymerase chain reaction (PCR) and fluorescence detection of microbiological contaminants.

Method: QSP 61517 - Analysis of Microbiological Contaminants

COMPOUND	ACTION LIMIT	RESULT	RESULT
<i>Salmonella</i> spp.	Not Detected in 25g	ND	PASS
Shiga toxin-producing <i>Escherichia coli</i>	Not Detected in 25g	ND	PASS

Analysis conducted by 3M™ Petrifilm™ and plate counts of microbiological contaminants.

Method: QSP 6794 - Plating with 3M™ Petrifilm™

MICROBIOLOGY TEST RESULTS (PLATING) - 07/30/2025 **ND**

COMPOUND	RESULT (cfu/g)
Coliforms	ND
Total Aerobic Bacteria	ND
Total Yeast and Mold	ND

NOTES

Sample unit mass provided by client.